Fostering Interprofessional Patient-centred Collaboration in Healthcare through CPD: Our Learnings from the PARTNER Programme

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ABSTRACT
Interprofessional patient-centred collaboration in healthcare is necessary for the effective management of chronic diseases. Continuing professional development (CPD) programmes that offer a platform for healthcare professionals of different disciplines to convene and learn together may function as an effective platform to both foster greater collaboration between them and increase awareness of patient perspectives. We report on our learnings from organising the PARTNER programme – a CPD initiative on the management of psoriasis and/or psoriatic arthritis – that targeted both specialists (comprising rheumatologists and dermatologists) and primary care. After participating in the programme, learners demonstrated a stronger intent to collaborate with each other and a heightened awareness of patient perspectives. However, changes at a practice level could not be evaluated due to the lack of substantial follow-up data. Our experience offers useful insights as to the effectiveness and limitations of organising CPD programmes to promote interprofessional collaboration and patient-centred care. The role of such programmes in the management of chronic diseases, and their ideal format, should be further explored as they have potential to effect change in practice.

Introduction
Interprofessional collaboration occurs when healthcare professionals of diverse backgrounds and differing professional cultures work together to provide care that addresses a patient’s needs [1, 2]. An interprofessional, patient-centred approach is particularly important in the management of chronic diseases, because comorbidities and long-term impairment in daily functioning are frequent in such conditions [3–6].

Interventions to promote interprofessional collaboration in healthcare can be practice-based, education-based or organisation-based [7]. While there is insufficient evidence to show the effect of practice-based interventions on interprofessional collaboration to improve patient health outcomes, clinical processes or efficiency outcomes, externally facilitated interprofessional educational activities have been reported to slightly improve healthcare professionals’ adherence to recommendations, use of healthcare resources as well as patients’ functional status, and so may be more effective in bringing about collaborative working behaviours [8]. Continuing medical education (CME) and continuing professional development (CPD) programmes therefore represent an opportunity to foster effective interprofessional collaboration in the management of chronic diseases.

Here, we report our experiences in Australia from the PARTNER programme, a CPD initiative that aimed to start a discussion and promote interprofessional collaboration to improve the management of psoriatic arthritis (PsA) and psoriasis. PsA is a chronic autoimmune disease that affects peripheral joints, entheses and axial sites in addition to skin and nails [9]. In the majority of patients with PsA, skin manifestations of psoriasis precede the onset of joint symptoms by several years [10]. As such, interprofessional collaboration from dermatologists, rheumatologists, and general practitioners (GPs) can reduce the disease burden on patients and society bringing forwards earlier diagnoses to prevent irreversible joint damage and reduce long-term socioeconomic consequences [11, 12].

By sharing the key learnings from our experience, it is hoped that this paper can provide useful insights in developing future medical education programmes, in particular, to promote interprofessional collaboration in managing chronic diseases.

Methods
National Australian Survey
To ensure that the CPD programme addressed geographically relevant issues, an online survey was
distributed through Psoriasis Australia, a support organisation for patients with psoriasis and/or PsA in Australia. This survey aimed to gain perspectives on the attitudes of patients with psoriasis and/or PsA and included questions regarding the diagnostic process, impact of symptoms on quality of life, physician–patient relationships and unmet treatment needs.

**Design and Structure of the PARTNER Educational Programme**

The PARTNER education programme comprised (a) two live symposia targeting rheumatologists and dermatologists, and (b) a one-hour accredited online module aimed at primary care, targeting GPs and nurses.

Our learning objectives for the programme were:

- Differentiate the outcomes for patients with PsA who are diagnosed, referred and treated as early as symptoms are recognised
- Develop a treatment and management plan that incorporates the patient’s perspective and be aware of the associated cardiovascular, metabolic and psychosocial comorbidities
- Identify changes needed in practice to be able to recognise PsA symptoms early
- Formulate a system to improve interprofessional collaboration during the long-term management of patients with PsA

The programme was designed by In Vivo Academy in conjunction with the Group for Research and Assessment of Psoriasis and Psoriatic Arthritis (GRAPPA) and the Australian College of Dermatology (ACD). These leading bodies supported the programme by recommending suitable experts for the independent faculty – dermatologists and rheumatologists with expertise in psoriasis/PsA – to present and help develop the symposia. The same independent faculty, along with a community GP, also reviewed the online primary care module content.

We used interviews of patients with PsA as the backdrop for both the symposia and the online module to better engage and motivate learners – the incorporation of patients’ perspectives has been recommended for better impact and value in a CPD/CME activity [13]. Psoriasis Australia assisted us with contacting patients to interview for the programme.

**Live Symposia**

Two separate one-and-a half hour symposia were held in conjunction with the following national congresses:

- ACD Annual Scientific Meeting
- Asia Pacific League of Associations for Rheumatology (APLAR) Congress

Each symposium comprised presentations on the challenges of diagnosis and effective management of PsA, followed by a panel discussion on evidence-based information as well as sharing of clinical experience and expertise. The focus of this discussion was to improve management of PsA (e.g., using current screening tools available for PsA, management of common comorbidities and clinical evidence for novel therapeutic options).

Dermatologists were invited to the rheumatology congress symposium (the APLAR congress), and vice-versa with rheumatologists being invited to the symposium held at the dermatologist meeting (the ACD scientific meeting). The specialists were sent email invitations using our organisation’s database.

**Accredited Online Module**

A one-hour online module featuring material from the ACD symposium, interactive questions with immediate feedback and actual patient cases was made available on the In Vivo Academy learning platform. To complement the main learning objectives, links to background reading recommended by the faculty on psoriasis and early PsA were also provided to the GP and nurse learners.

The module was approved by the Royal Australian College of General Practitioners (RACGP) Quality Improvement & Continuing Professional Development programme and by the Australian College of Rural and Remote Medicine (ACRRM) activity in the 2017–2019 triennium for CPD points. It was advertised to primary care professionals through our organisation’s database.

**Outcomes Evaluation Design and Collection**

For both the live symposia and the online module, tests were conducted to assess the impact of the programme and help learners identify and reflect on learning objectives. These comprised (a) a pre-test to serve as baseline of healthcare professionals’ knowledge and current practice relating to psoriasis, PsA and comorbidities (b) an immediate post-test to evaluate whether learning objectives were met and to measure change in knowledge resulting from participation in the symposium (c) a follow-up assessment administered two months after participation to evaluate long-term outcomes.
Results

National Australian Survey

The national patient survey (n = 79) identified two existing gaps in the management of the psoriasis and/or PsA in Australia:

a. a delay in diagnosis after the onset of symptoms – 55.8% of the respondents reported having symptoms for at least four years before being diagnosed with PsA.
b. inadequate management of the disease’s impacts on quality of life – over half of the respondents indicated that the biggest impact of PsA was on their daily activities. The next most frequently reported outcome was the impact on their emotional well-being.

A sense of helplessness towards treatment was a common theme among free text responses. For instance, when asked regarding their reasons behind dissatisfaction towards healthcare providers for PsA, 20% of the respondents cited a lack of improvement in symptoms, whereas another 14% felt that their healthcare providers did not adequately understand the disease or were unhelpful.

Although the sample size was small, these findings were largely congruent with the results of the 2012 Multinational Assessment of Psoriasis and Psoriatic Arthritis (MAPP) survey – the first multinational, large-scale probability survey to be conducted on psoriasis and PsA [14,15]. (The MAPP survey was a population-based telephone survey across North America and Europe with a random patient sample (n = 3426) identified using random digit dialling.) The results of our national survey were used to (a) reaffirm the needs of patients with PsA and psoriasis in Australia for interprofessional, patient-centred care and (b) fine-tune the content of the programme during its development.

Live Symposia

Dermatologist (n = 28) and rheumatologist (n = 30) learners.

Intent to Increase Frequency of Inter-disciplinary Communication

Rheumatologists and dermatologists demonstrated an intent to communicate with one another more frequently after attending a symposium. In the post-test, 23% more dermatologists indicated they would involve GPs and rheumatologists often or always in their correspondence about patients with PsA, and 52% more rheumatologists responded that they would seek dermatologist input, at least occasionally, to exclude psoriatic skin and nail lesions in patients with a provisional diagnosis of early seronegative rheumatoid arthritis (Figure 1).

Intent to Screen More Frequently for PsA and Its Comorbidities in Practice

When asked how their practice would change as a result of attending the symposium, dermatologists indicated an intent to increase the use of screening tools for PsA, while rheumatologists reported an intent to pay greater attention to comorbidities in patients with PsA. This suggested that co-participation in an educational event could bring about complementary changes in respective practices to improve outcomes for patients with PsA.

Learner Evaluation

Overall, the symposia were well received, with activity objectives being rated “fully met” or “partially met” by both rheumatologists and dermatologists (Figure 2). When asked about their key learnings

![Figure 1](image-url)  
**Figure 1.** Frequency at which dermatologists would include GP and rheumatologist in correspondence regarding patients with PsA (left), frequency at which rheumatologists would seek dermatologist input in new cases with a provisional diagnosis of seronegative rheumatoid arthritis (right), to exclude psoriatic skin and nail lesions.
from the symposia, response differed between the two specialities. For example, dermatologist learners tended to commend the discussion about new biologic agents, while rheumatologist learners saw this largely as a reiteration of well-known PsA treatments.

Unfortunately, due to the lack of substantial follow-up data from the learners at the symposia (<5% response rate), long-term change at practice level could not be evaluated.

**Online Module**

GPs and nurse learners (n = 46).

**Intent to Discuss Impacts of Psoriasis on Quality of Life More Routinely**

After completing the online module, more GPs and nurses intended to ask patients with psoriasis about quality-of-life or daily functioning at most or every consultation than before the module (100% post-test versus 48% pre-test).

**Intent to Screen More Frequently for PsA**

We also found that GPs and nurses intended to screen more frequently for PsA in patients with psoriasis. After the activity, 80% of respondents said they would ask a patient with psoriasis about joint pain at every consultation, compared with 20% before the activity (Figure 3).

**Increased Confidence in Management of PsA**

After completing the online module, more GPs and nurses reported that they were at least reasonably confident in their ability to identify patients with psoriasis who might have PsA. In addition, more GPs and nurses (80% post-test versus 47.8% pre-test) reported being at least somewhat confident in monitoring patients on biological disease-modifying antirheumatic therapies, a class of biologic agents indicated for PsA.

**Learner Evaluation**

The online learning module was well received, with more than 70% of learners agreeing that each objective had been entirely met (Figure 4). When asked how their practice would change after completing the module, 36.6% of learners were able to identify practical ways of incorporating PsA screening into their practice (e.g. screening in waiting room, utilising screening tools). Just over a quarter of learners (26.6%) listed early diagnosis and referral to a rheumatologist as a key takeaway from the module.

Long-term follow-up results from the online module were encouraging, with all follow-up responses reporting that they were able to implement changes into their practice. However, this was not considered conclusive due to the small number of responses (n = 6).

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**Figure 3.** Frequency at which GP and nurse learners would ask about joint symptoms in patients with psoriasis.

**Figure 4.** Learners’ evaluation of the intended learning objectives of the online learning module (n = 30).

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**Figure 2.** Learners’ evaluation of the intended learning objectives of the symposia (dermatologists n = 12, rheumatologists n = 16).
Discussion

Engaging an Interprofessional Audience

While the delineation of content between primary care and specialists was clear, tailoring content to specialists in the target audience of the symposia was one of the more challenging aspects of the PARTNER programme. Rheumatologists and dermatologists focus on different aspects of PsA – the discussion, formal presentations, and audience Q & A at the symposia tended to diverge according to the specialities of the audience. An overtly specialised environment can be inconducive for the learning and engagement of the other participating disciplines, with the differing feedback we received from rheumatologists and dermatologists in the post-test being evidence of this.

Organising an educational initiative focussing specifically on the condition itself – independent of medical speciality congresses – could therefore be an effective alternative to promote interdisciplinary discussion for chronic diseases.

Ensuring Substantial Outreach with Concise and Enduring Digital Content

Securing the participation of specialists also proved to be a difficult task – our learner numbers were lower than anticipated for the symposia because we had intended for the symposia to be held within the national congresses; however, they were instead held on days outside the main congresses which substantially reduced our attendee numbers. We produced a recording of one of the symposia and were again disappointed with viewing uptake. In response to this, we created a highlight reel of short 1 to 7 minute-excerpts from the presentations, which substantially increased our learner numbers. The compilation was better received than the full-length recording, suggesting that specialists may prefer short and targeted educational material. Highlight clips developed from existing material can therefore be a cost-effective method of delivering enduring and digestible content to a larger audience of specialists amidst their busy schedules.

Evaluating Changes to Clinical Practice

The learners of the PARTNER programme showed intent to change their practice by increasing communication with practitioners of other disciplines and the frequency at which they screen for PsA, its comorbidities and/or impacts on quality of life. This is encouraging as intent to change has been highly correlated with actual behaviour change [16]. Unfortunately, the lack of long-term follow-up responses prevented us from ascertaining if changes occurred in clinical practice as a result of participation in the programme.

This could be attributed to (a) the small number of learners and (b) the self-directed, goal-oriented nature of adult learning – making continued participation less likely after learners fulfil objectives relevant to their practice [17]. Our experience with the PARTNER programme highlights that increasing the number of learners (e.g. ensuring that CPD meetings are held as part of congresses and maximising outreach to relevant healthcare professional communities) is essential to accurately evaluate the long-term impacts of educational initiatives.

Including a Patient Narrative

Incorporating patient narratives into the content enriched the practitioners’ understanding of patients’ needs, which can often be limited by short consultation times at the clinic [18]. This also allowed a switch from didactic content to better engage learners. The patient narrative that formed the backdrop of the content of our online module for GPs and nurses was particularly well received – evident in the striking increase in number of learners intending to ask patients with psoriasis or PsA about their quality-of-life, from the pre-test to the post-test.

Conclusion

CPD programmes can be leveraged to foster interprofessional collaboration and patient-centred practice in the management of chronic diseases. Our learning experiences with the PARTNER programme show how a two-pronged educational effort targeted at primary care and specialists can lead to an overall increase in an intention to collaborate with each other and a heightened awareness of patient perspectives. Engaging healthcare professionals across different disciplines and obtaining follow-up data, however, are two major challenges to consider when developing and implementing interprofessional CPD/CME programmes.

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