Developing a collaborative health practitioner through strengthened accreditation processes

A project of the Health Professions Accreditation Collaborative Forum

Final Report

August 2024

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Acknowledgement of Country

The Health Professions Accreditation Collaborative Forum (the Forum) acknowledges Aboriginal peoples and Torres Strait Islander peoples as the Traditional Owners and custodians of country throughout Australia. We recognise their continuing connection to land, sea, and community. We pay our respects to them and their cultures, and to Elders, past and present.

Acknowledgements

The project team gratefully acknowledges the contributions made to the project by:

- Consumers, health practitioners and education providers who contributed their experiences and views to our understanding of collaborative practice and how to develop collaborative practitioners
- Mr David Copley, Kauna/Peramangk Elder and immediate former Chair, Aboriginal and Torres Strait Islander Health Practice Accreditation Committee of the Australian Health Practitioner Regulation Agency (Ahpra)
- Clinical Professor Fiona Stoker, immediate former Chief Executive Officer (CEO), the Australian Nursing and Midwifery Accreditation Council (ANMAC)
- The Interprofessional Education (IPE) Working Group, Health Professions Accreditation Collaborative (HPAC) Forum:
    - Ms Bronwyn Clark, Chief Executive Officer, Australian Pharmacy Council (APC) and HPAC Forum IPE Lead
    - Ms Theanne Walters AM, Deputy Chief Executive Officer, Australian Medical Council (AMC)
    - Professor Brian Jolly, Chinese Medicine Accreditation Committee, Ahpra
    - Associate Professor Sue Kirsa, Chair, APC
    - Associate Professor Fiona Kent, Chief Investigator (Research), Faculty of Medicine, Nursing and Health Sciences, Monash University
    - Ms Glenys Wilkinson, Deputy Chief Executive Officer, APC.

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ISBN: 978-1-923118-17-1

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List of acronyms

Acronym	Meaning
Ahpra	Australian Health Practitioner Regulation Agency
CHF	Consumers Health Forum of Australia
EOI	Expression of Interest
HCCA	Health Care Consumers' Association of the ACT
HPAC Forum, the Forum	Health Professions Accreditation Collaborative Forum
HPESG	Health Professions Education Standing Group of Universities Australia
IPCP	Interprofessional Collaborative Practice
IPE	Interprofessional Education
NRAS (also referred to as The National Scheme)	National Registration and Accreditation Scheme
WIL	Work-integrated Learning

Glossary

Term	Meaning
Collaborative Practice *(also known as Interprofessional Collaborative Practice)*	Collaborative practice in healthcare occurs when multiple health workers from different professional backgrounds provide comprehensive services by working together with patients, their families, carers and communities to deliver the highest quality of care across settings.(1)
Consumer, Health consumer	A consumer is a person who uses (or may use) a health service, or someone who provides support for a person using a health service. Consumers can be patients, carers, family members or other support people.(2)
Interprofessional Education	Refers to educational experiences where students from two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes.(1)
Patient	For the purposes of this report, the word patient refers to someone receiving (or who has received) healthcare services.
Person-centred care ***(also known as patient-centred care and woman-centred care)***	The person-centred approach treats each person respectfully as an individual human being, and not just as a condition to be treated. It involves seeking out and understanding what is important to the patient, their families, carers and support people, fostering trust and establishing mutual respect. It also means working together to share decisions and plan care.(3)

About this work

This work has been undertaken by the Australian Pharmacy Council and the Australian Medical Council on behalf of the Health Professions Accreditation Collaborative (HPAC) Forum (the Forum). The Forum is a coalition of 15 accreditation authorities representing the 16 regulated health professions under the Health Practitioner Regulation National Law.

Purpose of this report

This report describes the research findings and case studies collated as part of the project *"Developing a collaborative health practitioner through strengthened accreditation processes"*.

The report will:

1. Summarise the findings of the project.
2. Describe the current state of IPE for health professional students within the National Registration and Accreditation Scheme (NRAS).
3. Highlight the implications of the research findings for Forum strategic direction and future actions.
4. Identify approaches for developing consensus guidance to strengthen accreditation processes for IPE.

Background

The Health Professions Accreditation Collaborative Forum (the Forum), representing the regulated health professions under the Health Practitioner Regulation National Law,[(4)] has the ability to work with member organisations and other stakeholders to improve the quality, efficiency and effectiveness of accreditation and assessment functions.

The Forum provides leadership to the accreditation community on matters that commonly affect its members. Forum members support the development of collaborative health practitioners through effective interprofessional education (IPE).[(5)] IPE has been acknowledged for some time as an important area for leadership and the findings presented in this report will inform the Forum's work moving forward.

Over the last decade, the Forum has worked with a wide range of stakeholders to enhance the interprofessional education (IPE) provided to Australian health profession students as a contributor to the development of collaborative health practitioners. Following the first IPE workshop in 2015, *"Collaborating for Patient Care - Interprofessional Learning for Interprofessional Practice"*[(6)] members agreed on several actions to improve accreditation processes and contribute to the inclusion of IPE in health profession education programs.

In 2018 the Forum published a position statement that included a shared definition of IPE and collaborative practice based on definitions published by the World Health Organization (WHO)[(1)]. Forum members also adopted a set of IPE competencies to guide accreditation authorities in the assessment of health profession programs.[(5)] The Forum's IPE working group has continued to progress IPE initiatives.[(7, 8)] A survey of Forum members, conducted in 2019 and published in 2020 on the Forum's website, provided information regarding accreditation standards and assessment processes for IPE.[(7)] Key findings from this survey are summarised in Table 1.

Table 1 Key findings from HPAC Forum survey (2020)

	The majority of accreditation authorities have developed standards/criteria specific to IPE.
	IPE accreditation standards/criteria focus primarily on curriculum content and less on the assessment of collaborative practice.
	IPE meant different things to Forum members. A range of responses were provided describing what constitutes IPE.
	Forum members do not always provide education providers with guidance regarding the types and level of evidence required to demonstrate provision of IPE.
	Most Forum members indicated that defined learning outcomes were essential to meet IPE standards/criteria.
	Accreditation assessment teams rarely include members of other health professions.

Following this survey, the IPE working group identified the need to complete further work, and the project *“Developing a collaborative health practitioner through strengthened accreditation processes”* commenced.

The project has two components:

- To gather perspectives on collaborative practice from consumers, health practitioners and education providers as a program of education research.
- To collate examples of IPE and IPCP and determine how to support education providers and accreditation authorities in the provision of effective IPE.

This report provides the project findings, including recommendations for further work.

Introduction and context

Collaborative practice is described as occurring 'when multiple health workers from different professional backgrounds provide comprehensive services by working with patients, their families, carers and communities to deliver the highest quality of care across settings.'[1] Healthcare provided according to a collaborative practice model has been shown to deliver enhanced health outcomes and healthcare efficiency by optimising the skills of team members to better meet patient needs.[1] Evidence suggests that interprofessional education (IPE) is one method to prepare health professionals to practice collaboratively.[1]

To provide context to the project, the following section summarises the available literature, with a particular focus on the role of accreditation in the development of collaborative health practitioners.

Interprofessional education (IPE)

IPE is now an established component of health professional education. Support exists for education providers to develop and provide IPE. Several international and national organisations have prepared resources aimed at supporting the provision of IPE and the development of collaborative skills in both pre-qualification students and qualified health professionals. Appendix 1 provides a selection of the published guidance for IPE.

IPE can be provided in a range of settings to contribute to the development, or enhancement, of the skills required for collaborative practice. In pre-qualification programs, IPE can be provided on campus or as a component of work-integrated learning (WIL) experiences. Health practitioners can complete a range of initiatives in their workplace to maintain and enhance their collaborative practice skills.

A variety of teaching and learning methods have been employed to deliver IPE. Simulation-based learning, e-learning and problem-based learning are the most common methods for delivering IPE.[9] Most studies describe IPE that develops student awareness of their role and that of other professions, with fewer focused on mastering interprofessional practice through experiential learning undertaken with health professional teams.[10] The duration of IPE varies from hours to months, although most activities are provided over a period of less than three months, with some lasting hours.[10-12]

Successful implementation of IPE is typically founded on recognised adult learning principles including:[12]

- Evidence-informed design
- Opportunities to experience, practice and apply learned knowledge and/or skills
- Coaching and feedback to support learning
- Reflection
- Longitudinal program design.

It remains unclear when to introduce IPE into the curriculum for optimal outcomes.[10, 13] Students appear to have formed clear, uniprofessional views prior to commencing their health profession studies.[14] These views, shaped by many factors including the perspectives of

family and friends, direct their decision to choose a particular professional path and may be influenced by social views of professional hierarchy. This suggests a need for early appreciation of interprofessional collaborative practice and a focus on patient-centredness.(14)

IPE requires students to learn with, from and about other health professions, yet each of these activities will likely require different timing within the curriculum. Students may be enthusiastic to learn *about* other health professions early in their studies, however, their ability to *inform* others of their role may take more time, so is better aligned with later parts of the curriculum.(15) This view aligns with the programmatic approach described by Teodorczuk et al.(16) in which health profession students engage with activities designed to build an understanding of both their own and other health professions early before moving on to more advanced IPE activities and subsequently applying their collaborative skills in practice toward the conclusion of the program.(16) These considerations have implications for curriculum design and accreditation expectations.

Outcomes of IPE

Systematic reviews have identified positive outcomes resulting from IPE, however the wide range of IPE objectives, formats, settings and interventions impedes identification of strong outcome evidence.(17) Studies suggest that students benefit from IPE by developing skills required for teamwork, confidence in their professional identity and an understanding of the roles and responsibilities of other professions.(10, 18) IPE has been shown to improve the attitudes of both students and professionals towards members of other professions, the value placed on a collaborative team approach to patient care, understanding of the roles of other professions and personal perception of collaborative skills (e.g. communication, conflict resolution).(11) Behaviour change as a result of IPE is less clear although indicators are positive.(11)

Challenges and enablers for IPE

Despite the evidence supporting a contribution of IPE to the development of collaborative practitioners, the implementation of IPE within health profession education programs has faced challenges. Fundamentally, interprofessional collaboration requires health professions to work together. From a practical perspective, inclusion of IPE has been difficult to achieve, with reasons cited including timetable challenges, a lack of leadership and funding and a limited ability to 'add' IPE to an already crowded profession-specific curriculum.(19) As a consequence, the inclusion of IPE in existing full curricula has been less than optimal and remains inconsistent both across and within health professional programs.

Additional factors that impact the provision of effective IPE include:(19-22)

- Competition for resources between disciplines and a failure to adequately resource collaborative teaching, which is acknowledged as resource intensive
- Reliance on a small number of individuals to undertake IPE design, development and/or implementation which impacts the sustainability of IPE
- Poor respect displayed between students of different professions
- IPE initiatives not supported by faculty

- Differences in assessment requirements between professions for the same IPE activity which can be impacted by different accreditation requirements
- Differences in the type of knowledge or language used between professions.

"IPE has always been a field that 'swims against the current' of educational structures and processes that are built on the unidisciplinary model of departments and schools within the university." Clark P (2021)[20] [Page 184]

Less literature has been published describing the enablers for IPE. Factors considered important to the provision of IPE within higher education institutions can be identified at the government/ profession, institution and individual levels.[19] Influential examples include: [19, 23]

- Adequate funding and support
- A commitment to IPE driven by a 'top-down' approach such as policy choices (noting a 'bottom-up' approach fed by IPE champions can also contribute, although is less likely to flourish and be sustainable without policy support)
- The establishment of collaborative groups with shared ownership and goals
- A clear vision for IPE supported by enthusiastic and skilled staff and offered in a range of ways including formal and informal learning opportunities.

Collaboration as a lifelong skill

Developing a collaborative health professional workforce requires not only the establishment of collaborative skills and knowledge but ongoing professional development that supports and enhances these skills in practice. IPE should be viewed as both foundational and a lifelong contributor to effective practice. The development of collaborative skills during pre-entry education may be overshadowed by early uncooperative experiences in the workplace,[24] highlighting the importance of continued collaborative experiences.

"An attempt to bridge the gap between interprofessional education and interprofessional practice is long overdue." D'Amour & Oandasan (2005)[25][Page 8]

The inclusion of interprofessional education within continuing education programs or in the workplace is considered an important contributor to the development and maintenance of a collaborative health workforce.[1] Practice-based interprofessional interventions designed to improve interprofessional collaboration can improve healthcare outcomes.[26] Studies investigating the inclusion of workplace programs that support collaborative practice vary widely in their focus (e.g., communication skills, clinical management processes, teamwork), method (e.g., workshops, implementation of revised methods for providing care) and the outcomes reviewed (e.g., changes in health professional attitude, changes in adherence to clinical protocols, improved patient care outcomes).[17, 27] In geographical areas facing health workforce shortages, continuing interprofessional education has the potential to remove barriers to collaboration.[28] Self-assessment and reflection are important components of developing and maintaining collaborative skills and tools have been developed to facilitate this process.[29-31] The importance of identifying the development of these skills, and their application to interprofessional experiences, would appear an important focus of accreditation processes.

Consumer involvement in IPE

Maintaining a central focus on the consumer is fundamental to collaborative practice and an important founding principle for IPE.[32, 33] The active participation of consumers in IPE programs has many benefits. Students gain a greater appreciation for the consumer experience, insights into the importance of collaboration and begin to develop skills such as empathy and teamwork.[34, 35] Consumers report feeling heard, an appreciation of collaborative teamwork, the development of greater assertiveness in their relationship with health professionals and an increased confidence in managing their health.[34, 36, 37] The involvement of consumers in the development of IPE programs was highlighted as an area for improvement in a review conducted of IPE programs in the UK.[38] That report suggested that service users be involved in 'planning, teaching, mentoring, assessing and reviewing of IPE.'[38]

Assessment of IPE skills

Within education programs, assessment provides a clear view of the priority elements of practice. Learning is often driven by what a student considers most likely to be emphasised in assessment and particularly summative assessments. Consequently, aspects of practice that are not assessed are likely viewed as less important.

> *"What we assess and how we assess it demonstrates to the student what we value and has a profound effect on their behaviour and approach to learning. There is no better way of raising standards and the quality of our education program than through appropriate and effective assessment with feedback to the student and teacher." R. Harden (2015) [39] [Foreword]*

As for other elements of an education program, effective assessment of IPE skills and knowledge ensures students have achieved the required capabilities. Assessment also demonstrates the importance of this component of the curriculum. Studies exploring the assessment of IPE have largely focused on perceived attitude and skill changes resulting from IPE activities.[31, 40, 41] Best practice assessment for IPE has not been established.[31]

Practical issues impact the ability of professions to work together to assess student collaborative skills. For example, what requires assessment, and the preferred assessment method/s may differ according to profession-specific factors, including professional competence standards and accreditation requirements. Developing standardised assessments that apply fairly across professions, meet the needs of each profession, and provide effective evidence of collaborative skills is complex.[42]

A range of tools has been employed to assess aspects of interprofessional practice. Tools can facilitate self-assessment,[29, 30] peer assessment[43] or observed assessment[40, 44] and may be designed for use on a single occasion or repeated.[31, 45] However, the majority facilitate the assessment of attitudes to collaborative practice, with fewer designed to assess the collaborative function of a team or an individual.[31, 46] Many assessment tools are based on recognised competency frameworks, although not all have been subjected to rigorous psychometric analysis.[31, 47] Despite a large number of available assessment tools, it appears further work is required to consolidate the most effective approach across the learning continuum.

Health professional students undertake clinical placement or work-integrated learning during their education program, which provides an opportunity to practice, reinforce and continue to learn collaborative practice skills. The clinical placement setting may also be ideal to assess interprofessional skills.

Cross professional assessment of collaborative skills involving assessments completed by assessors from other professions may seem a logical component of IPE and a clear demonstration of interprofessional collaboration. However, this type of assessment is infrequently implemented.[40] Low acceptance of assessments completed by other professions may contribute to a reluctance to implement this type of assessment.

An example of cross professional assessment conducted in the clinical placement setting is provided by Skinner et al.[40] In this example, facilitators from different professions assess and provided feedback to students from all professions using a collaborative assessment tool. Establishing the program required multiple allied health professionals to model effective interprofessional skills which ultimately benefited both the student and teacher. The authors highlighted interprofessional differences in terminology as a challenge in developing the program, overcome by understanding the meaning attached to profession-specific language.[40]

Role of accreditation in developing the collaborative practitioner

Accreditation can drive curricula change and impact the advocacy for IPE in health education programs. The role of accreditation in defining and upholding educational standards, consistent with contemporary professional expectations, is a powerful driver for change.[48, 49] The incorporation of IPE within a program is commonly shaped by accreditation requirements[48] which can also contribute to innovation in the delivery of IPE[22] and consistency across professions.[50]

Accreditation authorities differ in their descriptions of, and expectations for, IPE in Australia**.** While some provide detailed expectations, others are less prescriptive. Studies highlight variability in the inclusion of standards that describe the expectations of IPE between health professions.[22, 48, 51, 52] Accreditation authorities are inconsistent in the detail they include in standards for IPE, the level of accountability indicated by the standard/s, the expected assessment approach, and the support provided by accreditation authorities for IPE.[22, 48, 51, 52] Inconsistency impedes meaningful transformation of the health workforce through cross-professional development of collaborative graduates.[48] Variations in the specificity of accreditation standards impacts curriculum development and the assessment of interprofessional competence.[19] While standards support the inclusion of IPE in health profession programs, greater accountability is facilitated by the use of language that explicitly describes the expectations of IPE within the program.[51] This enables accreditors to seek specific evidence when reviewing programs[51] and reinforces the priority of IPE within the program.

The types of evidence educators provide to illustrate the inclusion of IPE within a program tend to focus on the details of the program and infrequently relate to other standards domains such as student involvement, consumer involvement, resources and/or organisational

commitment to IPE.[51] Accreditation standards currently capture evidence of 'occasions for IPE' without an indication of the quality of these opportunities.[50] Azzam et al. suggest accreditors should seek 'evidence of the quality of IPE application in both didactic and practice-based settings'[50] while Reeves et al. support the development of robust tools of measurement for IPE aimed at measuring the outcomes of IPE. [23]

Health professions define their respective accreditation standards consistent with professional expectations. Although there are common domains (e.g., governance, resourcing, student matters), interprofessional variation necessarily exists in some of the expectations of education providers, as defined by standards. While individual professions may support the inclusion of curricular content designed to develop collaborative skills, tension exists between a program's commitment to profession-specific accreditation standards and the contribution to collaborative ventures.[22] As described above, differences in standards regarding the assessment of interprofessional skills may create fundamental challenges to groups working together to design and deliver IPE programs unless all participating professions can meet their respective accreditation standards.[22]

International studies highlight a need for cross professional consistency in accreditation standards for IPE, including the definition of IPE,[51] language used to describe program expectations[49] and the approach to implementation of IPE standards.[22] These considerations apply to the Australian context, described as consisting of a *'fragmented and inconsistent approach to IPE in accreditation standards and to IPC in practice standards and these concepts are ill-defined and often lack accountability.'*[52]

Project aim and objectives

Project aim

Building on the findings of the survey published in 2020, this project aimed to contribute to an enhanced collaboration between accreditation authorities and education providers in the delivery of IPE and the development of collaborative health practitioners.

Project objectives

To achieve this aim, the project comprised two objectives:

Objective 1: Educational research

To explore collaborative practice from a range of perspectives, a qualitative research study comprising multiple focus group sessions was undertaken.

The research study explored:

- The vision of a collaborative practitioner
- How collaborative practice skills are currently developed
- The future of health profession collaboration

- The role of accreditation in the development of the collaborative health practitioner.

Objective 2: Educational guidance

In response to the survey conducted by the Forum (2020), the project aimed to understand what practical guidance could support education providers and accreditation authorities to achieve the goal of developing graduates who are equipped to practice collaboratively.

To contribute to the guidance, a suite of practical case studies was collated and described in this report.

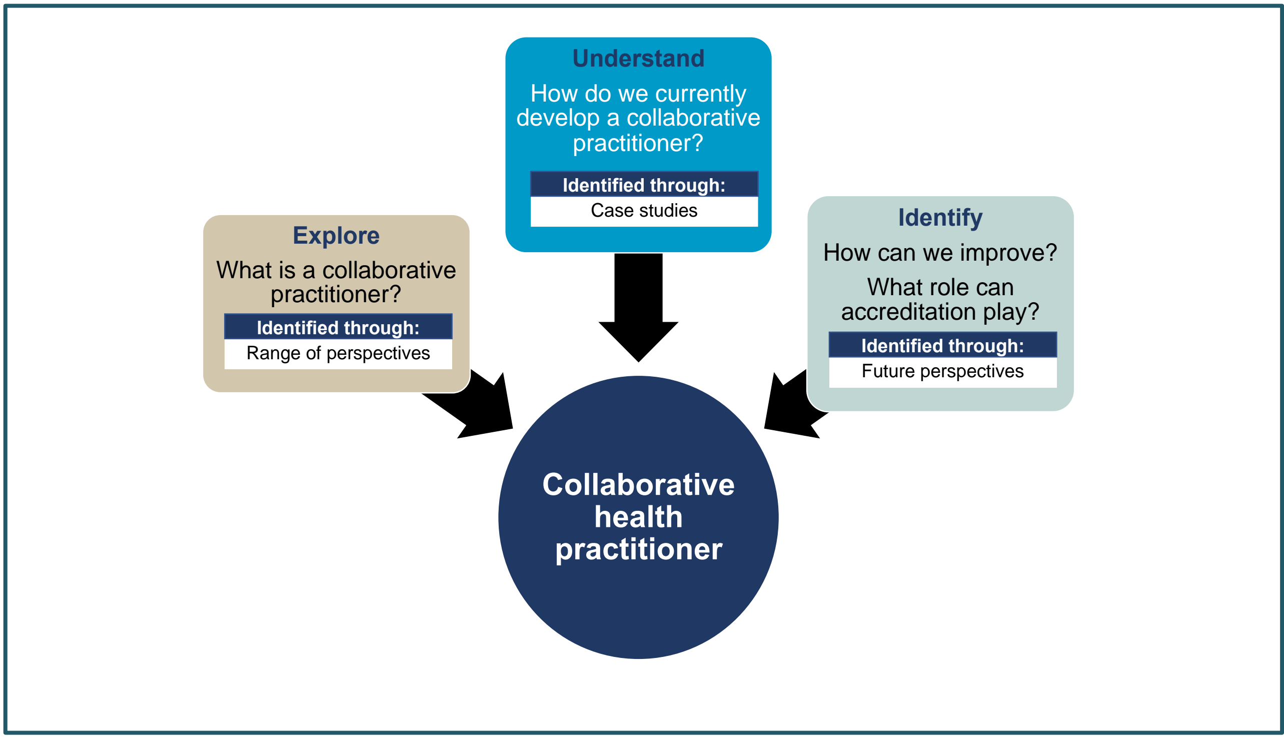

Figure 1 Summary of the project

Objective 1: Educational research

Research team

The research was conducted by a team that comprised the Forum's IPE working group, a project consultant funded by the Australian Pharmacy Council (APC) who had experience in qualitative research methods, two researchers from Monash University with extensive experience in IPE research and qualitative methods, an AMC staff member with experience in education development, research and evaluation, and one APC member staff who provided project management.

Decision making on all aspects of the project was firstly made by the IPE working group in

consultation with the entire research team. The project manager, external consultant and AMC staff served as the project team and delivered the project activities under the guidance of the IPE working group and the Chief Investigator. The IPE working group was convened regularly throughout the project.

Table 2 The IPE working group

Research team member	Organisation	Role
Ms Bronwyn Clark	Australian Pharmacy Council	IPE Working Group lead
Professor Brian Jolly	Medical Radiation Practitioner Accreditation Committee. Currently Chinese Medicine Accreditation Committee	IPE Working group
Ms Theanne Walters (AM)	Australian Medical Council	IPE Working group
Clinical Professor Fiona Stoker	Australian Nursing & Midwifery Council	IPE working group (now retired)
Associate Professor Sue Kirsa	Department of Pharmacy, Monash Health	IPE Working group
Ms Glenys Wilkinson	Australian Pharmacy Council	IPE Working group (now retired)
Mr David Copley	Aboriginal and Torres Strait Islander Health Practice Accreditation Committee	Indigenous perspective
Associate Professor Fiona Kent	Faculty of Medicine, Nursing & Health Sciences, Monash University	Chief Investigator (research component)
Dr Lynda Cardiff	Australian Pharmacy Council	Project team (consultant)
Dr Julie Gustavs	Australian Medical Council	Project team
Dr Sarah Meiklejohn	Faculty of Medicine, Nursing and Health Sciences, Monash University	Data analysis (research component)
Dr Josephine Maundu	Australian Pharmacy Council	Project team (project manager)

Ethics approval was granted by the Monash University Human Research Ethics Committee (ID: 34594)

Methodology

Introduction

A qualitative research design was utilised, underpinned by social constructivism, which recognises that there is no single reality, but that knowledge is constructed from experience and therefore there is value in exploring multiple perspectives.[53] Focus groups were selected as the preferred method for exploring the concept of collaborative practice and gathering the perspective of a range of stakeholders. Participants were sought from three broad groups: health consumers (consumers), education providers and health practitioners.

Focus group design

Focus group sessions were designed to comprise representatives of each participant group separately (i.e., health consumers, education providers or health practitioners) to tailor questions to the group and explore the collective perspectives. For education providers the research team aimed to have participants who represented the same health professional program but from different educational institutions in separate focus groups. However, scheduling according to these criteria was not feasible resulting in mixed participants for the education provider focus groups. Consumer and health practitioner focus groups were scheduled exclusive to each participant group. There were different health professions within the health practitioner focus groups. Focus group sessions were designed for a maximum of ten participants and allocated a duration of 90 – 120 minutes. A focus group schedule between 4 October and 10 November 2022 was agreed, based on the availability of 4 members of the research team.

Participant recruitment

Participants

Eligibility criteria were developed for each participant group to ensure recruitment of appropriate participants and maximise project outcomes (refer Table 3).

Table 3 Eligibility criteria for focus groups

Focus Group	Eligibility Criteria
Consumer	• Aged over 18 years and • Have received (or are receiving) healthcare for an illness or disability or • Provide care for adults or children who require healthcare for an illness or disability.
Education provider	• Aged over 18 years and • Have experience with the design, development, delivery and/or assessment of interprofessional education (IPE) for health professional

	students in the classroom and or workplace.
Health practitioner	• Aged over 18 years and • Have experience with the delivery of healthcare as part of a collaborative healthcare team.

Recruitment method

Health consumers were recruited via two national organisations: the Consumers Health Forum (CHF) and Health Care Consumers Australia (HCCA). Education providers were recruited via the health professions accreditation authorities represented in the Forum. Health practitioners were recruited through a snowballing technique via state government health service leaders, professional organisations and stakeholder networks.

The consumer organisations and accreditation authorities recruited participants using a variety of methods, including direct email, social media and/or newsletters. Recruitment was conducted between 9 September and 30 September 2022.

Potential participants were asked to submit an expression of interest (EOI) provided as a link to an online form. Participants were invited to nominate as a consumer, education provider or health practitioner, based on the study eligibility criteria which was embedded in the online EOI. Potential participants could also select preferred timings for the relevant focus group as this information was also populated in the online EOI, or indicate that they wished to be contacted for an alternative offering. All participants who submitted an expression of interest were provided with an explanatory statement, consent form and focus group registration process. To attend a focus group session, potential participants were required to provide written consent and to register for the online focus group session.

One focus group comprised entirely of some members of the Universities Australia Health Professions Education Standing Group (HPESG) who opted in by submitting written consent.[1]

A research study webpage was also published on the APC website to provide information about the research study for potential participants.

Focus group questions

The project team developed a series of focus group questions which were refined with input from the broader research team. Questions centred around three areas for exploration (refer Appendix 2):

- What is collaborative practice?
- How do we develop collaborative practitioners?
- How might health professional education improve the development of the collaborative practitioner and what role can accreditation play?

[1] Universities Australia Health Professions Education Standing Group (HPESG). Details available from: https://www.universitiesaustralia.edu.au/policy-submissions/health/

Conducting the focus group sessions

Focus groups were recorded and conducted using Zoom[R] technology. Each session was moderated by a member of the research team. In addition, a second team member was assigned to take notes, observe non-verbal contributions, and monitor time. Participants provided consent for the sessions to be audio recorded.

Data analysis

Preparation of transcripts

An independent service provider generated verbatim transcripts for each focus group session. Transcripts were allocated to one of two research team members for correction and verification. Identifying names and places were removed to preserve participant anonymity. Transcribed interviews were loaded into NVivo 20 (QSR International) for frame-work analysis.

Data interpretation

A thematic analysis of the focus group transcripts was undertaken using a combination of inductive and deductive coding according to the multiple research questions. In the first instance, all research team members coded a sample of transcripts independently, before gathering as a group to propose an initial coding framework. Transcripts were then formally coded by two members of the team using Nvivo[R] software, with frequent meetings with the larger research team to discuss interpretations of the findings in relation to the research aims until consensus was reached. Quotes that exemplified important findings were identified to explain themes in the presentation of the results.

Summary of findings

Participant details

Nineteen (n=19) focus groups were conducted between October and November 2022 with 84 participants. This included two consumer focus groups (n=10 participants), two health practitioner representative focus groups (n = 4 participants), the HPESG focus group referred to above (n=8 participants), and fourteen education provider focus groups (n=62 participants).

Table 4 Total participant attendance across the nineteen focus groups

Participant group	Number of participants
Education providers	62
Health practitioners	4

Consumers	10
Health Professions Education Steering Group	8
Total	84

Table 5 Number of focus groups conducted for the research

Participant group	Number of focus groups
Education providers	14
Health practitioners	2
Consumers	2
Health Professions Education Steering Group	1
Total	19

The research team sought to recruit participants representative of all Forum professions. Accreditation managers were therefore a key partner in reaching education providers. Participants were asked to nominate which of the 15 regulated health professional programs they represented (nursing and midwifery were combined) in the online EOI. Of the health profession members of the Forum 14/15 were represented but with varying numbers of participants. A large number (n=13) of focus groups participants selected the “other” option in the EOI to indicate that they did not consider themselves as representing one single health professional program. Some participants explained that their roles cut across several professional programs, or that they represented a self-regulated profession such as speech pathology, dietetic. This group contributed to 2 focus group sessions categorised as education providers.

Table 6 Health profession programs represented in the focus groups

Profession	Number of participants
Aboriginal and Torres Strait Islander Health Practice	1
Chiropractic	1
Dental	4
Medical	5
Medical Radiation Practice	6
Nursing / midwifery	2

Optometry	1
Osteopathy	2
Occupational Therapy	4
Paramedicine	2
Pharmacy	11
Physiotherapy	5
Psychology	5
Other*	13
Total	62

*included self-regulated health professional education programs, individuals with cross cutting roles for example IPE coordinators or Deans of Allied Health schools.

Analysis

The results are organised into four sections, to align with the research questions:

- Consumer, education provider and health practitioner expectations of collaborative practice
- Current and future skills required for collaborative practice
- Collaborative practice environments in which learning occurs
- Role of accreditation in developing collaborative practitioners.

For the purposes of this report, we have used the term 'patient centred care' as this is consistent with the language used by our participants, and the language most commonly used by our consumer representatives. It is however recognised that the term 'person-centred care' has been adopted as a preferred term elsewhere.

Consumer expectations of collaborative practice

The patient is central to all health care

Across participant groups there is an expectation that the patient is central to all health care practice. A patients' lived experience and knowledge about their health should be actively sought, and their agency prioritised in decision making. There is a need for healthcare professionals to further align clinical practice according to patient priorities.

Patients are experts in the experience of their health

Better recognition of the role of patients as an expert in their own health was highlighted. Consumer focus groups emphasised the need to be recognised for their expertise and contribution to the healthcare team.

The patient's support network plays a significant role in their healthcare and should be recognised

A patient's family, friends, carers and community are as important in a patient's health care as the health professionals. There is a need for the healthcare team to recognise the contribution that this broader social support system plays in a patient's healthcare.

Hierarchies hinder collaborative practice and health professionals need to collaborate across settings

Consumers, education providers and health practitioners described the need for all health professional interactions to be complementary and of equal importance in the pursuit of holistic collaborative care. Silos and perceived or actual professional hierarchies where one health profession/professional may be seen as having greater importance or value than others were viewed as counter-productive to collaborative care. Health professionals need to collaborate across settings, to assist in coordinating the shared goals for a patient.

Current and future skills required for collaborative practice

When asked to define their vision for collaborative practitioners now and in the future consumers, education providers and health practitioners identified multiple knowledge, skills and attributes. To present these in a meaningful way, participant views have been grouped according to three dimensions proposed by Billett as defining readiness for practice: what individuals know, can do and value.[54] These dimensions have been described as conceptual, procedural and dispositional.

Table 7 Dimensions and themes of readiness for practice

Dimension	Examples
Conceptual knowledge (facts, information about roles)	• Explain the features of holistic healthcare • Describe the processes required for effective continuity of care including transitions and connectivity between health care services • Describe own role and the role of other professions • Describe where own role is situated within the broader health care system • Describe how own role is emerging within the broader health care system

Procedural knowledge (skills, tasks, communication)	• Prioritise and facilitate the central role of the patient throughout the healthcare system • Listen respectfully to the needs and opinions of all parties involved in patient centred care • Facilitate the creation and implementation of shared goals • Communicate in shared language with patients, families, carers and communities and healthcare professionals • Utilise digital technology, processes and systems to facilitate team collaboration • Demonstrate culturally safe practice, and responsiveness with the patient, families, carers and communities, and the healthcare team • Work alongside others in the health care team through demonstration of teamwork • Demonstrate leadership and address conflict in the pursuit of collaborative practice
Dispositional knowledge (attitudes, values, interests)	• Demonstrate respect for the patient and others in the healthcare team • Value all healthcare team members' contributions to collaborative decision-making • Demonstrate willingness to work collaboratively within a team treating people with dignity, compassion and empathy • Demonstrate open-mindedness and trust with the patient and other members of the healthcare team • Demonstrate humility with patients and others in the healthcare team • Engage in reflexivity on the collaborative patient centred practice

Conceptual framework adapted from: Billett, S. Readiness and learning in health care education. The Clinical Teacher. 2015;12(6):367- 372.

Collaborative practice environments

Learning was identified as occurring across a range of settings:

- Universities – as part of formal curriculum with dedicated interprofessional learning activities, assessments, student clinics
- Acute health care settings – including hospital wards, surgical settings, Emergency department, intensive care units, outpatient clinics, and co-located services
- Community settings – including community pharmacies, specialist clinics, GP clinics, Homes, private practice, aged care facilities.

Collaboration is needed within and across settings

Multiple aspects of the healthcare system were described as being reliant upon collaborative practice. Examples included the NDIS, rural and regional settings, which were particularly

dependent on collaboration when service or staff availability was reduced.

Collaborative learning experiences during clinical placements require further development

Across all settings, a range of factors were identified that may be prohibitive to learning and establishing collaborative practice:

- The assumption that students will engage in interprofessional learning experiences on a clinical placement, which may or may not occur
- Historic ways of working in silos, and the presence of perceived 'hierarchies'
- Interprofessional curriculum being perceived as an 'add on' thus preventing its integration and communication of the importance to learners
- Private practice payment models that disincentivise health practitioners to collaborate, such as the NDIS models
- Concerns regarding confidentiality and sharing of patient information across areas of healthcare practice
- Day to day pressures which may lead to collaborative practice being de-prioritised
- Models of care, including day to day responsibilities and patient scheduling, may reduce interprofessional learning opportunities.

Factors seen as being potential enablers to collaborative practice included:

- Consistent messaging throughout healthcare training to support collaborative practice
- Advances in digital communication systems to support collaborative practice
- Physical co-location of health professions
- Positive culture within the workplaces and health education programs including role modelling
- Activities such as handovers or case conferences which facilitate collaborative practice
- Scaffolded interprofessional learning opportunities for development of professional identity
- Interprofessional case management structures within community settings
- Existing synchronous and asynchronous collaborations.

Learning activities to support the development of collaborative practitioners

Learning opportunities within health professional education programs aimed at developing collaborative practitioners could be categorised as:

University based learning

Multiple IPE activities were offered across universities, including:

- Online units/modules
- Face to face workshops and simulation
- Patient case discussions
- Participation in student IPE clinics
- Embedded assessments such as OSCEs, reflective journals and writing referral letters which focused on demonstration of skills related to collaborative practice.

"So, it was great we had an IPE program embedded into first year, which I think was really important to set those foundations or expectations that this is the new way that healthcare is going in the sense that this has to be part of your skill set. I think that really highlights to students that this is not something you can just fashion later or just ignore." (Education provider)

"I think the way you can introduce interprofessional care could be through assessments initially. So, I think the first, especially the first year for most health professions is made up of broad sciences and it's broad healthcare, and it's not specific to the disciplines. So, perhaps I think you can start earlier having some oral presentations and some assessment that emphasise an importance of good collaborative care." (Education provider)

Workplace based learning

Formal experiences

- Shadowing
- Shared placements
- Observations and meetings
- Reflective assignments
- Supervisor driven experiences.

"So, it might be just not necessarily [being] there with other students but recognising that there is another health professional there and spending the good old shadowing that we've always done on placements forever, even when we went through, there's interprofessional learning that occurs there, which is going to facilitate collaboration in time. So, I think it's sometimes just recognising the simple things are also really good." (Education provider)

Informal experiences

These experiences were often assumed to be happening organically by educators in particular

- Coincidental conversations with other health professionals
- Supervisor suggested interactions with other health professionals
- Within the scope of 'day to day' activities where interactions will happen with other health professionals.

"We can't guarantee that all those students are developing those collaborative skill competencies. …I think it's really hard, because of the diversity of the placement experiences that our students receive, not to undersell that the value of those experiences either. And certainly I'm very aware a lot of the health networks now themselves are really focusing on IPE." (Education provider)

Role of accreditation in developing collaborative practitioners

Accreditation authorities can facilitate the development of a collaborative healthcare workforce, by seeking to identify evidence of interprofessional learning within health profession programs. Multiple potential levels of evidence of commitment to training for collaborative practice were identified.

These are outlined below based on the domains identified within accreditation standards.

University commitment

- Dedicated IPE leadership
- Policies, systems and structures in place (guidelines or a framework for IPE)
- Consumer involvement in health professions curriculum or programs such as consumer input into advisory groups.

"having that recognised role that's respected and funded long term is the difference in sustaining these programs and assisting with accreditation. … I think that those core, IPE positions are so crucial across a faculty." (Education provider)

"we are engaging with consumer ideas in the curriculum. Our faculty is quite interested and has done quite a lot of work, has structures in place, has a healthcare collaboration, advisory group, and has representation across all the schools in our faculty." (Education provider)

Program

- Evidence of co-designed curriculum with consumers with a focus on collaborative patient centred care.

"I think consumers need to come on board in the training. They need to work alongside lecturers and maybe develop some of the resources and the teaching materials. I think that's really missing and I think it can be very stale if you're just having a very highly qualified lecturer developing or not developing anything but delivering your course materials." (Consumer)

- Evidence of a continuum of integrated interprofessional curricula throughout program

- Evidence of interprofessional student activities/experiences (case studies, workshops, simulations, IPL clinics) throughout the program
- Evidence of interprofessional learning opportunities in workplace activities
- Evidence of authentic and programmatic assessment
- Evaluation of interprofessional learning activities aligned to interprofessional learning outcomes
- Evidence of preparation of practitioners for facilitating collaborative practice.

Learning and assessment opportunities provided to support collaborative skill development

- Demonstration of key competencies through observation and evaluation of student behaviours, skills and knowledge (what student work looked like)
- Formal activities – assignments, reflective journals where collaborative practice
- Informal activities – placement interactions with other health professionals.

"With a lot of this it has to be longitudinal. You can't be looking at IPE for just six months. Has that [the IPE] influenced students' behaviours, attitudes, not just did they like it, did they not like it? I'd like to see that accreditors also look [more broadly], I could claim I'm collaborating, but really does the nursing school think I'm collaborating? ...It's almost like peer assessment of our contributions, I think that would help." (Education provider)

Health Services

- Formal opportunities for students to work collaboratively – IPE placements
- Informal opportunities for students to work collaboratively
- Policies and procedures in place which support and role model collaborative practice and patient-centred care
- Leadership and champions
- Co-designed curriculum/teaching with universities.

"I think what's just been highlighted is the importance of culture… You have a duty really, and a responsibility to, be part of and contribute and learn from teams. So, I think that culture [needs] a bit more work in terms of determining what culture we need to support the learning and behaviours of all our health professionals. Policies and processes that really enable this and in fact potentially put in barriers to where it, you know, where it doesn't work or… some sort of consequences.". (Education provider, HPESG)

Resources

- Dedicated staff at all levels
- Material resources.

"It's always difficult, isn't it? These initiatives feel tokenistic, but we know how important they are until someone really puts their money where their mouth is. Then I think you need staff trained in

this type of workplace standard to be able to teach the new clinicians coming through. I don't see any other way around that." (Patient focus group)

"I think is funding potentially is another one…I would think that some of the primary health networks might be able to put on some of these occasions or the pharmaceutical society for instance, I think would do more of them if they didn't have to do it out of their own pocket. So that would be another of simple mechanism." (Health service representative)

Study limitations

The establishment of a collaborative health workforce would consider the longitudinal development of knowledge, skills and attitudes across the continuum of education from undergraduate courses through to continuing professional development. This was beyond the scope of this work, with our pragmatic decision to focus on professional entry to practice degree programs leading to health professional registration under NRAS. Vocational training programs that graduate enrolled nurses (who are also regulated under NRAS) and specialist medical colleges were excluded from the study.

The study may have benefited from the perspectives of students who have engaged with IPE activities. This participant group, while not included in the research, may contribute to ongoing discussions focused on the implications of project findings.

Conducting focus group sessions using an online platform creates a unique set of challenges not faced when meeting in person. Focus groups ideally provide an opportunity for discussion between participants resulting in a broad range of views offered spontaneously. When conducted online, this spontaneity may be somewhat lost, with participants required to raise their electronic 'hand' and speak in turn.

Internet access may have been inconsistent, resulting in participants losing their connection periodically and/or, in some instances, unable to attend. Similarly, non-attendance can be contributed to time differences across the country. Unfortunately, there were a few occasions where participants did not attend or joined the session late, creating the unique situation for the moderator of welcoming a participant and providing a brief recap of the session before engaging with the participant while maintaining group momentum.

Objective 2: Educational guidance

Purpose

The second component of the project aimed to review how IPE is currently provided and consider an approach to the development of practical guidance to support and strengthen accreditation processes that focus on the development of collaborative health practitioners.

Many examples of IPE are available in the published literature. The first detailed review of IPE in Australia investigated the design and delivery of IPE across the country between 2011 and 2013.[55] Notwithstanding the findings of this important work, the project team sought to review and understand how IPE is currently provided. To achieve this, contributions were sought from education providers who had participated in the focus groups conducted as part of project Objective 1. Participants were asked to contribute authentic case studies that provided descriptions of either:

- IPE provided in various settings by higher education training institutions
- Experiences of Interprofessional collaborative practice from health practitioners or
- Lived experiences of consumers.

One project team member facilitated the collation of case studies, which were reviewed by all project team members and the IPE Working Group.

IPE case studies

Those that agreed to contribute case studies were provided with a template to guide their submission. After initial drafting, case studies were reviewed according to a blinded peer review process. IPE experts from the Forum and Forum accreditation managers contributed to the peer review process, which was completed by two peer reviewers per case study. Reviewers provided feedback according to uniform criteria and authors were provided with feedback after the project oversight group had reviewed and agreed with the comments.

Additional meetings were held with the author to discuss the feedback obtained during the peer review process and to contribute to draft revision. Figure 2 provides a summary of the process used to draft the IPE case studies. The case studies are available in Appendix 3.

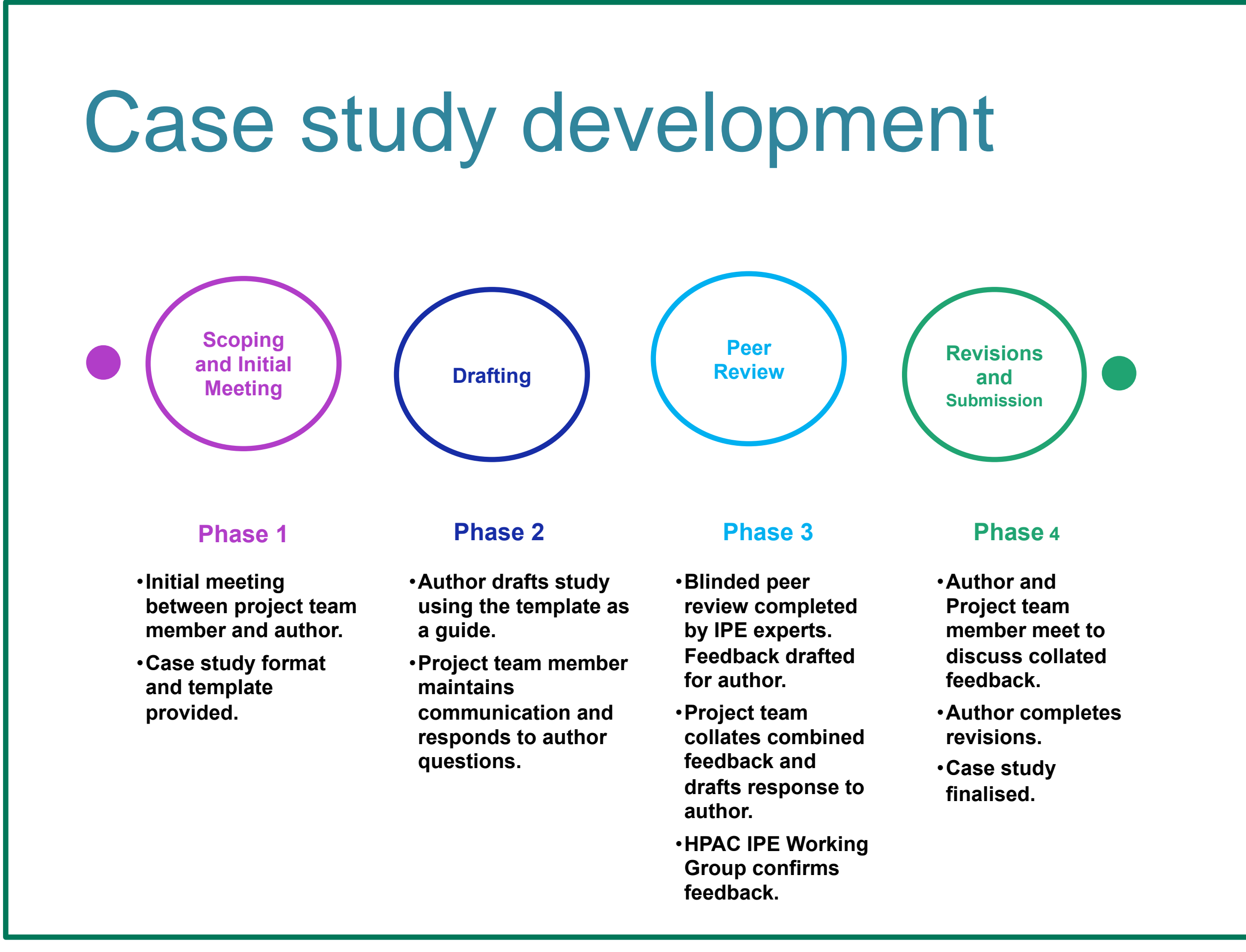

Figure 2 IPE case study development process and timeline

Features of IPE case studies

The case studies contributed by education providers describe a range of IPE activities developed to meet the needs of the student cohort according to site-specific requirements. Activities focus on a range of topics and employ several different teaching approaches. A summary is provided below.

Setting

Case studies describe IPE offered across a range of settings, including metropolitan and regional facilities. All examples describe sites where multiple health professions are found, although not necessarily co-located.

Participants and aim of the activity

Health profession students engage with IPE activities across the spectrum of their learning. Activities may be provided exclusively to students in their first years of learning, representing an early opportunity to learn about the practice scope and role of other professions. Alternatively, interprofessional learning opportunities may be provided for students completing their final year/s with a focus on collaboration in the context of more complex clinical scenarios. Not all of

the examples involve a clinical focus. Gilligan et al. (Appendix 3) describe IPE activities intentionally designed without clinical content to cater for students who have not yet gained clinical skills.

Activities aim to contribute to:

- Skills essential to collaboration e.g., communication, time management, self-reflexivity, respect, conflict resolution, leadership, patient advocacy
- Understanding of patient management practices
- Interprofessional cohesion
- Student confidence when working with other professions
- Understanding of social determinants of health.

Authors describe both mandatory and voluntary IPE activities.

Format

Some IPE activities are provided on-campus, while others are completed on-line. Dane et al. (Appendix 3) describe IPE activities that include students providing a community outreach service. In some cases, activities are designed to be completed while the student is undertaking experiential learning e.g., during a scheduled clinical placement experience. Group and individual tasks are described, as are activities that may be completed synchronously or asynchronously.

Pedagogy

A range of pedagogical approaches are described, including collaborative and integrative case-based learning and reflective learning. Commonly, authors describe the need for authenticity in design and the challenge of providing material that is meaningful to multiple professions.

The most successful programs were those that had constructively aligned curricula[56] whereby the purpose, outcomes, teaching and learning, assessment and evaluation are aligned and reinforce each other.

Tailoring learning to a variety of professions

Case study authors stress that efforts need to be made in programs to ensure that all students see that the content of the teaching, learning and assessments relates to their practice settings and professional development. There needs to be opportunities in the programs for learning about different professions, shared leadership and teamwork.

Leadership support

The case studies highlight the importance of senior leadership to support IPE programs. Authors consider leadership as instrumental to ensure the alignment of IPE with university goals and to secure adequate resourcing, staff allocation and cross-faculty support. Programs supported by a single champion were identified as vulnerable, particularly at times of staff-turnover.

Incremental continuous improvement

Authors highlight the importance of starting small and incrementally growing in terms of complexity and capacity. Relationship building is seen as key to this growth as is fostering of partnerships with a range of stakeholders. Strategic and opportunistic connections are seen to grow the programs.

Resources

IPE activities are implemented using a range of resources developed to contribute to learning. For example, videos, narrated slides, correspondence material, clinical cases specifically developed to facilitate interprofessional learning.

Many case studies report the complexity of logistics in organising interprofessional events which may include hundreds of students and involve liaison and timetabling with many different professions.

Authors note the importance of adequate staffing to ensure a sustainable approach to IPE program management. Considerable time is required to design, develop, implement and evaluate IPE activities, with some authors identifying the importance of dedicated staff to manage and operate IPE activities. Where IPE activities are not compulsory, student attendance can be difficult to predict, with a consequent impact on staffing requirements. Careful management of staffing, with a degree of flexibility, is therefore considered important.

Assessment of IPE skills

Programs often evaluate the IPE activities using pre- and post-test quizzes where students are asked to provide their perceptions of change in skills and/or confidence to practise collaboratively, rather than assessing collaborative skills or the outcomes of the collaboration. Some programs specifically assess student collaborative skills using a range of assessment methods. Vass et al. (Appendix 3) identified standardised assessments as an important future goal for their program to ensure students are assessed similarly, regardless of profession.

The assessment of IPE, in general, is seen as an area requiring further development. Many case studies indicate that the provision of authentic assessments is a particularly challenging for IPE. Authors also describe challenges in effectively measuring the impact of interprofessional education.

Future focus

Authors describe several exciting developments for IPE, including the development of workplace-based assessments, the standardisation of assessments across professions and the use of student experiences with IPE as a promotional tool. Cross-profession (and cross-sector) mandatory engagement with IPE for staff and students was described as an aim for one group. Finally, the establishment of systems that support the planning of clinical placements across professions was highlighted as a future endeavour.

Perspectives of IPCP

To further contribute to our understanding of collaborative practice, case studies describing the experiences of health consumers, and health practitioners who practise in collaborative team environments were sought. Two health practitioners provided case studies that describe their views on, and experiences of, collaboration. One health consumer contributed their experiences with the healthcare system and health practitioner collaboration and their views for future collaboration.

Health practitioner contributors were identified using professional networks; the health consumer contributed to the focus group and agreed to subsequently document their experiences with health collaboration. Full descriptions are available in Appendix 4.

What is working well in interprofessional collaborative practice?

Respondents offered their experiences with collaborative healthcare and highlighted their perspectives on the important contributors to effective collaboration.

Effective communication

Effective communication, including active listening, was highlighted as an important component of collaborative practice.

> *"The main GP service when I attended was very efficient and was very comprehensive, so I felt very confident with the service they were providing. I was managed by a number of GP's and allied health professionals, and they were very open and friendly and communicated well with me... because both the [nurse] educator and the sports physiotherapist took the time to explain my physical issues or the Medicare form and informed me that I had the option to negotiate with Allied health, I felt both confident and empowered." (Consumer)*
>
> *"We do our best to keep communication open and transparent at all times." (Health practitioner)*
>
> *"The leading health professional takes the responsibility to contact the rest of the team so that the family is not left communicating with individual practitioners...We strive to notify specialist clinics of pertinent changes that may not be seen in a hospital appointment which often has changing staff, delayed appointments, and brief consultations." (Health practitioner)*
>
> *"Stakeholder meetings via telehealth, which include the patient and their family and support workers, work well when all stakeholders attend, leave their egos or professional hierarchy at the door and actively listen." (Health practitioner)*

Recognition of, and engagement with, community systems and supports

The importance of an integrated approach to service provision that links healthcare facilities and the community was highlighted as a feature of effective collaboration.

> *"That the primary health care setting is working together in some way, so that they are in touch with the other services that are available so that there is a holistic approach to caring for clients/patients. Also provide information outside of their own service as well, targeted and non-targeted." (Consumer)*
>
> *"A focus on function, community access and independence is becoming commonplace, with a*

socially focused, not just a medical model becoming a greater consideration." (Health practitioner)

"We have established some excellent relationships with services that are already well established and who are keen for our offer of support. We do not wish to duplicate existing services and are keen to care coordinate in ways that support existing exemplars. We have worked with Emergency Department staff especially the mental health and Alcohol and Other Drugs (AOD) teams, Office of the Public Advocate, Police, Ambulance Service, Community Mental Health and Primary Health Network linking with GPs who have special interest in mental health and AOD." (Health practitioner)

Interprofessional skills: Respect, trust

Respecting the consumer and working with members of the healthcare team that consumers trust is important to positive health outcomes.

"We always 'ask' the patients and their usual supports where we can provide support. We do not force the issue…Engagement really is integral to our success and we have found our Peer Support Workers and Welfare Officers provide an excellent base from which to work with the most vulnerable patients. There is a greater trust with these individuals and through them we can slowly offer to engage the patient with services and teams and care with the advocacy and understanding that is rarely offered to these patients." (Health practitioner)

What is not working well in interprofessional collaborative practice?

Respondents highlighted their perspectives on the components of collaborative practice they consider require improvement.

Care co-ordination

Poor co-ordination of care, particularly at points of healthcare transition, was viewed as symptomatic of ineffective collaboration with the potential to negatively impact the consumer. Comments were also received regarding a perceived lack of collaboration between health professionals.

Co-ordination between health services and/or health professionals

"Hand over from tertiary settings works if there is a prior relationship with staff around that patient. However, the lack of financial support or infrastructure incentives from the government for allied health means we cannot access discharge summaries, radiology images or reports. Hospital policies preclude professionals recommending specific practitioners in the community. Families report feeling directionless and relying on word of mouth to find the best fit for their needs. This is costly and time inefficient." (Health practitioner)

"We believe that the health professional best placed to help the patient navigate their care and achieve best outcomes at that point in time should be the primary practitioner or at least be an equal voice. The GP is often this professional, but the historical hierarchy of the medical and tertiary settings means that the voice of a therapist in the community can be undervalued." (Health practitioner)

Lack of understanding of the skills required for collaboration

Health practitioners commented that the important skills required for collaboration require reinforcement in the workplace.

> *"While they have learnt about interprofessional collaborative practice (IPCP) at an undergraduate level, they may not experience this in their first job. It is incumbent upon employers to create a framework and provide the time to ensure IPCP is "de rigeur" for best patient outcome." (Health practitioner)*

> *"There is a lack of appreciation of skills needed to work collaboratively – and an overestimation of the value of professionals working in the hospital system. People define multidisciplinary in terms of team working within a system. This exemplifies the silos that define our current care systems. There has not been enough respect – or resourcing given to primary care – and our system is now struggling as a direct result of this. Our most vulnerable deserve to be cared for both acutely, across care transitions and arrive home safely – with good handover to primary care. All of this could and should be done – if our system worked for patients." (Health practitioner)*

What do you see collaboration in healthcare looking like in the future?

Health practitioners highlighted the primacy of the consumer in achieving effective collaborative practice.

> *"Innovative model of family led advocacy with the best health professional supporting them as a clinical lead." (Health practitioner)*

> *"Interdisciplinary with a real patient voice and patient centred outcomes actually being real instead of mission and vision statements." (Health practitioner)*

From a consumer's perspective, the importance of a genuine relationship with health practitioners was highlighted as was their willingness and ability to collaborate with other services for the benefit of the patient.

> *"Basically, for myself and my family having one GP or one GP service where there is not a high turn over of staff. It is difficult to develop a relationship, if the workforce is constantly changing.… So, I think having a good relationship especially long time and really knowing the person means they most times recognise that you may not be your usual self. Holistic health/ person centred/patient centred and having people with a range of skills and possibly health educators/health consumers who could possibly assist navigating the health care system, because it is getting extremely difficult to manage it all now. (Consumer)*

These case studies reinforce the data obtained during the focus groups, presented above.

Developing guidance

Accreditation plays a significant role in shaping health education programs. Literature highlights the contribution accreditation can make to IPE, including clearly communicating expected curriculum content, aligned to professional consensus, using shared language,(49) driving innovation,(22) continuous improvement of IPE in the curriculum,(50) and ensuring programs are accountable to defined quality indicators.(51)

The findings presented in this report highlight examples of the types of evidence accreditation authorities could seek when reviewing the IPE provided in a health profession program. Participants described a range of factors they viewed as important indicators of quality IPE. Evidence can be grouped into five domains as provided in Table 8.

In addition to IPE provided on campus, the importance of IPE learning opportunities provided in the workplace was considered by participants as important. Work-integrated learning that facilitates formal and informal opportunities to learn about collaborative practice were considered valuable e.g., dialogue between students of different professions, shared meetings and interprofessional case management opportunities. To support this, collaboration between health care settings and education providers in the design and development of learning opportunities was identified as important.

Table 8 Evidence domains within health professions program accreditation standards that can indicate support development of collaborative practice

Domain	Example evidence
University, Faculty, School commitment	• Presence of policies, structures and systems to facilitate IPE (this may include frameworks or guidelines for IPE) • Dedicated leadership and funding • Collaboration or consultation with consumers on curriculum design and implementation (this may include advisory committees)
Program	• Co-designed curriculum with consumers including a focus on collaborative patient centred care • Alignment of IPL activities to intended learning outcomes • Interprofessional student activities/ experiences embedded throughout program and including workplace activities • Integrated continuum of interprofessional curricular across program • Authentic and meaningful programmatic assessment of IPL • Training for practitioners responsible for facilitating IPL and collaborative practice.

Domain	Example evidence
Student	• Demonstration of collaborative practice through observation and evaluation of students' collaborative practice knowledge, skills and behaviours • Engagement with formalised activities within curriculum such as assignments and reflective journals about experiences of collaborative practice • Informal activities such as interactions with other health professionals in the workplace are encouraged and/or facilitated • Application of reflective and self-assessment skills to IPE activities
Health services	• Co-design of curriculum and IPL with universities • Identification of collaborative practice leaders and champions within settings • Policies and procedures in place to role model and support collaborative practice and patient centred care • Prioritise formal opportunities for students to work collaboratively • Identify informal opportunities for students to work collaboratively
Resources	• Material resources such as learning spaces, electronic and printed learning resources provided • Dedicated staff throughout all levels of the program are identified and provided with necessary supports and time to facilitate IPL

To support education providers, and the accreditation process, the development of practical guidance would be useful. This guidance should describe:

- the types of evidence accreditation teams should seek, based on the findings of the research and
- examples of the questions to seek responses to when undertaking site assessments, including who to address these questions to.

Discussion

This project aimed to explore aspects of collaborative practice from a range of perspectives, and to consider guidance that could support the development of collaborative practitioners through strengthened accreditation processes. We sought to understand how stakeholders view the collaborative practitioner, the skills they considered important for collaboration, and how collaborative skills are currently developed. We hoped to better understand how accreditation can contribute to improved collaborative skills of future health profession graduates.

Pleasingly, the findings of this project indicated a common view across all stakeholders that collaborative practice is an important aim for health education. Consumers described the impact of poor collaboration and challenged us to continue to improve the development of collaborative skills, including the desire to collaborate, in health profession graduates.

The findings reinforce many aspects of IPE in the available literature, including the challenges faced by education providers in providing IPE. The strength of this work, however, rests on the consumer voice, which has shone a light on the importance of the consumer contribution to their care, and collaboration recognising the primacy of consumer needs and preferences.

The vision of collaborative practice and the collaborative practitioner

Consumers, education providers and health practitioners contributed honest and rich views regarding their vision for the collaborative practitioner, including the manner in which collaboration should occur and the skills required of the collaborative practitioner.

Collaborative practice begins with patient-centredness

A common and striking view contributed across participant groups was the critical role the consumer and their support network must play in their healthcare. Collaboration between health practitioners, while important, falls short if not based on the expectations, beliefs, preferences and values of the consumer. Consumers told of their experiences, and the impact of poor collaboration. These stories serve to highlight the critical requirement that all health practitioners maintain a central focus on the consumer when undertaking their role.

Collaborative practice needs to span health and care sectors

Consumers highlighted the importance of cross-sector collaboration and ensuring a seamless transition between healthcare services. This integrated approach to care would see, for example, consumer access to essential community-based care arranged prior to discharge from a secondary care facility. Where this type of collaboration fails, consumers report finding themselves in a position of need, falling between the remit of two service sectors and ultimately having to arrange required services to meet their own needs.

Recognition that the healthcare team exists to provide patient-centred care and that healthcare hierarchies can be counter-productive to this

The research suggested that professional silos (either actual or perceived) impede the provision of effective IPE and contribute to poor collaboration in practice. A number of

dispositional skills were identified as inherent to the collaborative practitioner now and in the future. These include: humility, respect, open-mindedness, trust, reflexivity, valuing others and a willingness to work collaboratively. The knowledge, skills and roles of health practitioners were viewed as complementary between practitioners, both within and between care facilities.

Development of the collaborative practitioner

Education providers shared their approach to the development of collaborative health professional graduates and examples of IPE. Case studies described a range of interprofessional activities provided across practice settings, and innovative approaches to the design and delivery of IPE, based on the student cohort and available resources. Focus group participants considered both formal and informal activities important to the development of collaborative skills. Consistent with the IPE literature, focus group participants identified several barriers to IPE delivery, including timetabling challenges and difficulties in securing adequate personnel to support an IPE activity or program.

The consumer voice

Our research highlights the importance of enabling consumers to contribute as part of the collaborative healthcare team. Patient centred care has been a longstanding theme of many educational programs but seen as a separate body of knowledge to interprofessionalism, which is largely conceived as collaboration between health professionals. Rethinking this to include consumers as an integral part of the interprofessional health team is an important way of ensuring patient-centred care.

Students could also benefit from understanding how they can assist consumers to optimise their relationships with health practitioners.

Opportunities for accreditation

Consistent with the literature, participants viewed accreditation as a mechanism to enable programs to identify and secure the resources required to facilitate effective IPE. Participants suggested that accreditors should seek evidence of a commitment to developing collaborative skills, for example:

- dedicated leadership, staffing, resourcing, consumer involvement and policies and systems that support IPE
- evidence of collaborative skill generation and assessment longitudinally across the program
- the provision of formal and informal opportunities for students to experience and contribute to collaboration in the workplace.

These findings suggest a range of opportunities for accreditation authorities to contribute to the development of collaborative practitioners. Translating the findings of this project into tangible outcomes could include a range of initiatives broadly grouped around three important roles of accreditation: defining quality IPE in accreditation, implementing or enhancing quality assurance and improvement processes for IPE and supporting education providers to deliver quality IPE.

Defining quality IPE in accreditation

In recent years, accreditation has moved from a focus on *how* education programs achieve outcomes (the education process) to determining *whether* defined outcomes have been achieved. This change relies on the clear articulation of the intended outcomes of the program.

Despite the adoption of common definitions and competencies for IPE,[(5)] differences can be identified in the accreditation standards relevant to IPE across Forum members.[(52)] While most Forum members acknowledge the importance of defined IPE learning outcomes in meeting accreditation standards/criteria, the types of evidence required to demonstrate IPE content in the curriculum is infrequently defined by accreditation authorities.[(7)]

Clear descriptions of the expected outcomes of IPE would support accreditation and education providers alike. Accreditation authorities should clearly define *what they expect to identify* in the program, including evidence of the IPE opportunities included in the program, the processes that support the provision of quality IPE (e.g., leadership, adequate resources, commitment) and the expected outcomes of IPE which may be identified in graduate outcome statements or program learning outcomes, reflective of contemporary professional expectations. In addition, evidence that IPE is prioritised within the program should be sought. This may be identified in assessment processes that provide evidence of learner achievement of the required outcomes according to recognised best practice assessment methods and evidence of a culture that embraces collaboration e.g., dedicated IPE resources and strong leadership.

Further to evidence indicators of quality IPE, accreditation authorities should seek to understand *how the IPE program has been developed,* including what has informed its development. This will assist in identifying the hallmarks of good practice. The inclusion of consumers in the development of collaborative learning opportunities could serve to reinforce the important role of consumers as an integral part of the collaborative team. Similarly, the involvement of health service providers in shaping learning opportunities provided as part of work-integrated learning or clinical placement experiences suggests a commitment to maximising these opportunities for collaborative learning.

IPE offered during work-integrated learning (WIL) can provide an ideal opportunity to either formally or informally learn about collaboration. Accreditation authorities could seek to specifically understand what these opportunities look like and the healthcare settings in which practical experiences are offered. For example: whether learning opportunities during WIL are structured or informal (or both), required or elected; who is responsible for supervising IPE experiences (and whether they have received IPE training); the types of activities students engage in during this period of learning; and whether collaborative skills are assessed during the WIL period/s.

Implementing or enhancing quality assurance and improvement processes for IPE

Accreditation quality assurance and improvement processes could be expanded to include several initiatives designed to provide a comprehensive view, and a range of perspectives, of IPE in education programs. For example:

- Review of the composition of accreditation assessment teams to regularly include consumers and representatives of other professions

- Intentionally seeking specific feedback from students and representatives of other professions (student and/or staff) about IPE activities
- Obtaining feedback from students and supervisors regarding IPE opportunities completed during WIL
- Observation of IPE activities
- Exploration of the school/ department commitment to IPE.

Supporting education providers to deliver quality IPE

This project highlighted the role of accreditation authorities in supporting quality IPE initiatives. Achieving accreditation requirements drives curricula reform and accreditation authorities can support this outcome through a range of initiatives.

Education providers who are developing or reforming IPE could benefit from the practical guidance described in this report. Clear descriptions of the expected outcomes of IPE and the types of evidence accreditation assessment teams will seek during program review could assist education providers in the design, development and review of curricula.

The role of *accreditation assessment teams* could be supported by clear descriptions of the types of evidence relevant to IPE teams should seek during program review. In addition, the types of questions designed to elicit relevant program evidence (and who to seek this information from) could be described.

Informing those in *higher education leadership* positions about this research could contribute to an enhanced level of support for IPE in health professional programs. Our findings suggest that at the university or faculty level, policy initiatives, resource allocation and dedicated leadership are important supports for IPE. However, it is important to recognise that while policy decisions are important, local support for IPE in terms of both views and actions is critical.[55]

Opportunities for the Forum

This project identified exciting opportunities and several challenges for the Forum. Advancing IPE in health profession education programs aligns with the Forum's strategic plan (2023-2025)[8] and continues the established work of the Forum conducted over many years.

The Forum could further contribute to the development of collaborative health practitioners by reflecting on, and enhancing, collaboration within the organisation and with stakeholders external to the organisation.

Enhanced collaboration within the Forum

The Forum represents 16 health professions within the National Regulation and Accreditation Scheme (NRAS). Opportunities exist to model collaboration within this group.

Given the commitment Forum members have made to IPE, there is an opportunity to invest in a shared view of this aspect of the curriculum. An agreed *framework for IPE* would serve as a basis for consistent expectations across Forum members by guiding standards development/ review and quality assurance processes. A framework could include agreed competencies,

terminology and guiding principles for the development, implementation and assessment of IPE. The framework would provide a view of the expected outcome of IPE within programs while respecting the individual pedagogical approach of education providers to achieve these outcomes.

To contribute to this, a *review of the IPE competencies* adopted by the Forum in 2015 (updated 2018) for continued consistency with current expectations and applicability across healthcare settings and professions could be undertaken. Similarly, a *review of the Forum Position Statement on IPE* (2015, updated 2018) would seem prudent.

Forum members have significant experience with IPE, including practical experiences working as health practitioners, academic expertise and expertise in accreditation processes. This knowledge and experience could be shared to contribute to the collective wisdom of the Forum. For example, sharing the processes used to develop and review standards, or the processes employed during site assessment visits could benefit other members of the Forum. Establishing processes that foster sharing of experiences within the Forum could lead to innovation and contribute to continual improvement of accreditation standards and/or processes. Similarly, establishing processes that support interprofessional contributions to assessment teams would provide additional perspectives to accreditation reviews, as described above *(Implementing or enhancing quality assurance and improvement processes for IPE).*

Chappell describes a process designed to incentivise organisations to develop interprofessional continuing education, and identifies the challenges, and ultimate benefits, of accreditation authorities collaborating to achieve a common goal. The author reflects: "*We learned that we are more alike than we are different. We learned that it takes energy, trust, mutual respect, a willingness to build consensus and relinquish or adapt some of our individual approaches, and commitment to collaborate, but the end result is well worth the effort.*" [57]

Collaboration with external stakeholders

A range of organisations contribute to the development of collaborative practitioners. Sharing the findings of this work with other organisations may improve how collaborative skills are learned, practised and maintained.

The research findings and case studies presented in this report will be shared using a range of mechanisms, including peer-reviewed publications and presentations at conferences meetings and workshops. Details of the work will be available on the Forum website.

The Forum IPE working group recognises adjacent work relevant to the findings of this project. The Ahpra Accreditation Committee has recently released an Interprofessional Collaborative Practice Statement of Intent[58] which describes the commitment of the 16 health professions within NRAS to 'embedding interprofessional collaborative practice across the health system, in education, training, clinical governance and practice'. A review investigating health professional scope of practice in Australia has identified the need to strengthen interprofessional education[59] as a mechanism to improve primary care. Previous work, undertaken by Dunston et al. acknowledged the importance of effective and sustainable IPE in developing a collaborative health workforce, but warned that achieving this outcome would require system-wide changes in our approach to education and a commitment to investing in the 'structures,

processes and opportunities' that support this goal.[55]

The importance of experiential learning opportunities that support the development of collaborative skills was highlighted by the project. This provides an opportunity for Forum members to collaborate with health services to support IPE. This may include liaising with health service providers to contribute to the development and/or review of accreditation standards and to the development of a framework for IPE.

Collaborative practice is a lifelong philosophy. The development of collaborative skills during early education and training requires ongoing commitment and refinement which can be difficult to achieve where the practice environment does not model or reflect an expectation of collaboration. Where accreditation authorities contribute to continuing education, there is an opportunity to reinforce collaborative skills in this context.

The development of a collaborative health workforce will require all professions to consistently embrace the concept of collaboration. The inclusion of IPE in accreditation standards acknowledges that equipping health profession graduates with the ability (and desire) to collaborate is a required, rather that discretionary element of education programs.[55] There is an opportunity for this work to inform self-regulated health professions who are not members of the National Scheme.

Conclusion

The findings of the project have provided a deep understanding of interprofessional collaborative practice from a range of perspectives. The project clearly established common views held by health consumers, education providers, and health practitioners regarding the required skills and attributes of the collaborative practitioner. These include respect, valuing the contribution of others and patient-centredness.

The project has identified that education providers employ a range of methods to achieve the development of collaborative skills through their programs. The choice of approach appears to be shaped by a variety of factors, as indicated in the presented case studies. For some programs, few health professions may be available to support cross professional student engagement. It is hoped that the case studies, in describing mechanisms and innovations used to deliver initiatives that support collaboration, might stimulate programs to review and improve their collaborative practice strategy.

The important concept that developing collaborative practitioners requires more than a 'tick box' approach to delivering an IPE activity has been established by this work. Similar to patient-centredness, collaboration requires a sustained philosophy that should be evident throughout the program and comprehensively assessed longitudinally. Evidence that an underpinning philosophy of collaboration exists throughout the program is required and could form a focus for accreditation assessment teams.

Recommendations

At the conclusion of this project, the following recommendations are provided, consistent with the project findings.

1. The Forum develops a document that provides practical guidance about IPE, including the assessment of collaborative skills, for accreditation assessment teams and education providers
2. The Forum advocates for the development of a curriculum framework for IPE in Australia.
3. The Forum establishes processes that foster meaningful involvement of consumers, health service providers and members of other professions in the development and review of accreditation standards and associated accreditation processes.
4. The Forum establishes processes that support the sharing of IPE processes and experiences between members.

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Appendix 1: Published support for IPE and IPCP

Author (Source Country)	Title (Year)	Description
Competence Descriptions		
O'Keefe M.[60] (Australia)	Developing sustainable and embedded interprofessional education: threshold learning outcomes as a potential pathway (2015)	This report describes a set of threshold interprofessional learning competencies that graduates of health professional programs should have achieved. It also provides a best practice checklist for the provision of IPE during health care placements.
The Canadian Interprofessional Health Collaborative (CIHC) 'promotes collaboration in health and education.'[61] The collaborative represents educators, policymakers, health providers and students. CIHC provides resources to support collaborative practice.[61]		
Canadian Interprofessional Health Collaborative. (62) (Canada)	National Interprofessional Competency Framework (2010)	The Framework consists of 6 domains, each with a competency statement and a set of competency descriptors.
The European Interprofessional Practice & Education Network (EIPEN) works to 'stimulate and share effective interprofessional training in European higher education, and to improve collaborative practice in health and social care in Europe, in order to help optimize the quality of care and the quality of life of patients/clients.'[63] The organisation produces resources that support collaborative practice.		
European Interprofessional Practice & Education Network (EIPEN) [64] (Europe)	EIPEN key competences for interprofessional collaboration (2021)	The Framework provides key competencies that can be adapted for individual contexts. Five key competency areas are included, based on teamwork and patient-centred care. The competencies are operationalised in behavioural indicators and can be assessed using a 5-point scale.
The Interprofessional Education Collaborative (IPEC) represents 22 national health profession associations and aims to 'ensure that new and current health professionals are proficient in the competencies essential for patient-centered, community- and population-oriented, interprofessional, collaborative practice.'[65]		
IPEC. Interprofessional Education Collaborative [66] (USA)	IPEC core Competencies for Interprofessional Collaborative Practice (2023)	This document describes 33 competency statements grouped in 4 competency areas: • Values and Ethics • Roles and Responsibilities • Communication • Teams and Teamwork

Author (Source Country)	Title (Year)	Description
Accreditation		
Health Professions Accreditation Collaborative (67) (USA)	Guidance on developing quality interprofessional education for the health professions (2019)	This document provides high level guidance for the implementation of IPE with a view to promoting consistency across professions in areas such as terminology, the learning environment and assessment.
Joint Accreditation for Interprofessional Continuing Education(68) (USA)	Joint Accreditation Framework (2022, Updated 2023)	Provides criteria to be met by organisations seeking accreditation as a jointly accredited provider of continuing education.
Guidance for IPE Design, Development, Implementation & Research		
The Australasian Interprofessional Practice and Education Network (AIPPEN) provides a 'community of practice for individuals, groups, institutions and organisations across Australia and New Zealand who are committed to researching, delivering, promoting and supporting interprofessional learning, through interprofessional education and practice.'(69) The organisation maintains close alignment with the Australian & New Zealand Association for Health Professional Educators (ANZAHPE)(70) and Interprofessional.Global, the global confederation for interprofessional education & collaborative practice.		
AIPPEN provides a repository of publications, including short videos, aimed at supporting the development and delivery of effective IPE.		
The Centre for the Advancement of Interprofessional Education (CAIPE) is the 'leading organisation in the UK for Interprofessional Education and Collaborative Practice (IPECP), established in 1987.' The organisation has members worldwide who represent individuals, service users, students and corporate organisations and functions as an 'independent think tank'.(71) CAIPE has developed a number of relevant publications, including the two listed below.		
Ford J, Gray R. [(72)] (United Kingdom)	Interprofessional Education Handbook: For Educators and Practitioners Incorporating Integrated Care and Values-Based Practice (2021)	A resource for the development of interprofessional education. Intended for use by educators and practitioners of all health professions. Presented in two parts: Part One provides a detailed background to IPE; Part Two serves as a practical guide to planning, developing, delivering, promoting and evaluating IPE.
Barr H, Ford, J, Gray, R. Helme M, Hutchings M, Low H, Machin A, Reeves S.(73) (United Kingdom)	Interprofessional Education Guidelines (2017)	These guidelines are designed to inform organisations responsible for 'commissioning, developing, delivering, evaluating, regulating and overseeing IPE' in both the pre-qualification and continuing professional education settings.

Author (Source Country)	Title (Year)	Description
Interprofessional Research Global (IPR.Global) 'facilitates support and exchange between the interprofessional education and collaborative (IPECP) networks.'		
Interprofessional Research Global (IPR.Global). [74] (International)	Guidance on global interprofessional education and collaborative practice research. Discussion paper (2019)	This paper provides a background to IPE and collaborative practice, the rationale for establishing IPE/CP research and priorities for research in this area.
Additional Publications		
Thistlethwaite JE, Vlasses PH. A Practical Guide for Medical Teachers. Fifth Ed, 2017. Page 128-133[75]	Chapter 17. "Interprofessional Education". Edited by Dent JA, Harden RM, Hunt D, Hodges, BD.	This chapter provides a brief history of IPE along with relevant definitions and the rationale for inclusion in the medical curriculum and post-qualification education.
The National Collaborative for Improving the Clinical Learning Environment (NCICLE). [76] (USA)	Pathways to Excellence: Expectations for an optimal interprofessional clinical learning environment to achieve safe and high-quality patient care. (2021)	A tool to support healthcare organisations to provide optimal clinical learning environments for graduates and improved patient care outcomes.

Appendix 2: Focus group questions

Consumer focus group questions and rationale

Focus group aims

To better understand:

a) Consumer experiences of, and vision for, collaborative practice in healthcare.

b) Consumer perspectives of the future of collaborative practice.

c) The potential contribution of consumers to the development of a collaborative health practitioner.

Question	Rationale*	Link with Project Objective
Part 1 – Experiences of Collaborative Practice in healthcare		
1. What does the term “Collaborative health Practitioner” mean to you? Can you describe what you would expect to experience if you were receiving health care from a health professional who was collaborative?	HPAC Forum Survey finding 4.4.1 indicated that the concept of IPE included a range of concepts, as evidenced by existing accreditation standards.	The vision of collaborative practice
2. Can you describe a situation where you have experienced health practitioners collaborating to deliver healthcare? 2a How did this experience make you feel? 2b Is this a common experience for you?	The questions in Part 1 seek to understand the end goal (i.e., a collaborative practitioner) from the perspective of the consumer.	
3. Have you experienced a situation where healthcare did NOT seem to involve health professionals working together? 3c How did this experience make you feel? 3b Is this a common experience for you?		
Part 2 – The future Collaborative Practitioner		
4. Looking to the future, how would you like to see health practitioners collaborating together? 4a What professions or sectors would you like to see working together better? 4b What skills do you think will become important (or more important) for health professionals to collaborate in the future?		The vision of collaborative practice The future of health professional collaboration

Question	Rationale*	Link with Project Objective
5. Do you see a role for consumers in helping to develop collaborative health practitioners? 5a If yes, how would you like this to be done?		Consumer contribution to the development of collaborative practitioners
* *Interprofessional Education (IPE) Report on the Findings of a Survey of HPAC Forum members (April 2020)*[7]		

Education provider focus group questions and rationale

Focus group aims

To better understand:

(a) The vision of the collaborative practitioner from the perspective of education providers.

(b) Education provider views of the future of health professional collaboration.

(c) How accreditation authorities and education providers can collaborate to effectively achieve the aim of developing a collaborative practitioner.

<table>
<tr><th>Question</th><th>Rationale*</th><th>Link with
Project Objective</th></tr>
<tr><td colspan="3">Part 1 - Defining the vision – what is a Collaborative Practitioner?</td></tr>
<tr><td>1. What does the term “Collaborative Practitioner” mean to your profession? Can you describe what you would hope to see if you were observing a collaborative practitioner?</td><td rowspan="3">HPAC Forum Survey finding 4.4.1 indicated that the concept of IPE included a range of concepts, as evidenced by existing accreditation standards.

The questions in Part 1 seek to understand the end goal (i.e., developing a collaborative practitioner) from the perspective of each profession.</td><td rowspan="3">The vision of a collaborative practitioner</td></tr>
<tr><td>2. Can you describe a common example of interprofessional collaboration for your profession? Who does the profession collaborate with? How? Why? e.g., to seek advice, provide information or refer a patient?

2a. Can you describe an example of intraprofessional collaboration? Who? Why? How?</td></tr>
<tr><td>3. What skills are emerging as necessary for collaborative practitioners?</td></tr>
<tr><td colspan="3">Part 2 – How is the vision of a Collaborative Practitioner currently achieved?</td></tr>
<tr><td>4. How do you work towards that vision of a collaborative practitioner in your profession?

4a. What about intraprofessional collaboration? Is this important? How do you develop this?</td><td rowspan="2">These questions seek to understand IPE from the perspective of the education provider, maintaining a focus on the development of the collaborative practitioner.</td><td rowspan="2">How can we better achieve our aim?

The role of the education provider</td></tr>
<tr><td>5. What factors have made you successful in achieving the vision of a collaborative practitioner?</td></tr>
</table>

Question	Rationale*	Link with Project Objective
Part 3 – How can we work together to improve the vision of a Collaborative Practitioner?		
6. How do you see education providers and health services working together to develop collaborative practice skills in future health professionals?	The World Health Organization describes the development of collaborative practitioners as requiring integration between the health and education sectors. This question seeks to understand how this is undertaken practically.	How can we better achieve our aim? Improving the role of accreditation
7. How does **accreditation** contribute to the development of a collaborative practitioner? 7a. What could be improved? 7b. What could be provided that currently is not available?	This question will help us understand how accreditation may better influence the development of the collaborative practitioner.	
8. What **evidence** should accreditation authorities seek when assessing if programs are developing a collaborative practitioner?	Survey Findings 4.4.1 and 4.5 indicated that while some accreditation authorities have developed competencies and/or learning outcomes relevant to IPE, most provide limited (if any) guidance regarding the evidence required to indicate IPE activities.	
** Interprofessional Education (IPE) Report on the Findings of a Survey of HPAC Forum members (April 2020)[7]*		

Health service focus group questions and rationale

Focus group aims

To better understand:

a) The vision of a collaborative practitioner from the perspective of the health service.

b) Health practitioner perspectives on the future of health professional collaboration.

c) How accreditation authorities, health services and education providers can collaborate to effectively achieve the aim of developing a collaborative practitioner.

Question	Rationale*	Link with Project Objectives
Part 1 - Defining the vision – what is a Collaborative Practitioner?		
1. What does the term "Collaborative Practitioner" mean to the health service? Can you describe what you would hope to see if you were observing a collaborative practitioner?	HPAC Forum Survey finding 4.4.1 indicated that the concept of IPE included a range of concepts, as evidenced by existing accreditation standards. The questions in Part 1 seek to understand the end goal (i.e., developing a collaborative practitioner) from the perspective of the health service.	The vision of a collaborative practitioner – now and in the future
2. Can you describe a common example of **interprofessional** collaboration observed in the health service? Which professions collaborate? How? Why? 2a. Can you describe an example of **intraprofessional** collaboration? Who? Why? How?		
3. What skills are emerging as necessary for collaborative practitioners?		
Part 2 – How is the vision of a Collaborative Practitioner currently achieved?		
4. How does your health service contribute to (or facilitate) the development of collaborative practice skills? 17a. What about intraprofessional collaboration? Is this important? How do you develop this?	These questions seek to understand IPE from the perspective of the health service, maintaining a focus on the development of a collaborative practitioner.	How can we better achieve our aim? The role of the health service
5. What factors make a health service successful in fostering collaborative practice (in health profession students and/or in health service staff)?		

Question	Rationale*	Link with Project Objectives
6. How does your health service collaborate with other community sectors e.g., social services, police services, voluntary organisations? 6a. Are health profession students encouraged and/or required to engage with community services during their health service experiences?		
Part 3 – How can we work together to improve the vision of a Collaborative Practitioner?		
7. How do you see education providers and health services working together to develop collaborative practice skills in future health professionals?	The World Health Organization describes the development of collaborative practitioners as requiring integration between the health and education sectors. This question seeks to understand how this is undertaken practically. This question will help us understand how accreditation may better influence the development of a collaborative practitioner.	How can we better achieve our aim? Improving the role of accreditation
** Interprofessional Education (IPE) Report on the Findings of a Survey of HPAC Forum members (April 2020)[7]*		

Appendix 3: IPE case studies

Interprofessional education (IPE)

Experiences from health professions educators

This research includes five case studies of interprofessional education in medical programs in Australian universities. Developed using a standardised case study template, they provide insights into the context of the programs, purpose, design and description of the program, implementation, evaluation and future focus.

The five case studies are:

Case studies	Page reference
Case study 1: Development of Development and pilot implementation of online Interprofessional Education for Interprofessional Collaborative Practice (IPE-4-IPCP) learning modules for health care staff, health professions students and health education faculty. Professor Fiona Bogossian et al., University of the Sunshine Coast.	See pages 55-58.
Case study 2: Internal and external IPE: creating collaborative practitioners. Dawn Dane et al., Central Queensland University.	See pages 59-68.
Case study 3: A snapshot of Interprofessional Education (IPE) efforts implemented in the Joint Medical Program, University of Newcastle. Associate Professor Conor Gilligan et al.	See pages 69-74.
Case study 4: Interprofessional learning activities for the workplace setting, Associate Professor Gillian Nisbet et al. University of Sydney.	See pages 75-82.
Case study 5: Allies in Indigenous Health I, Allysa Vass et al., Monash University.	See pages 83-85.

Interprofessional education (IPE)

Experiences from health professions educators

Case Study 1

Title

Development and pilot implementation of online Interprofessional Education for Interprofessional Collaborative Practice (IPE-4-IPCP) learning modules for health care staff, health professions students and health education faculty.

Authors

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Key Themes:

Workforce development, interprofessional education, interprofessional collaborative practice, intersectoral collaboration, online learning

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Context

The Sunshine Coast Health Institute (SCHI) is a research and education institute co-located with the Sunshine Coast University Hospital (SCUH); a 600 bed, tertiary-level teaching hospital providing services to the Sunshine Coast and Gympie regions.

SCHI consists of four partner organisations, their staff and health professions students; Griffith University (medical students), the University of the Sunshine Coast (nursing, midwifery, occupational therapy, nutrition and dietetics, paramedicine, prosthetics and orthotics, clinical exercise physiology, biomedical science, psychology and public health students), Technical and Further Education Queensland (enrolled nursing, allied health assistance, health administration, individual support and health support services students) and the Sunshine Coast Hospital and Health Service, with a full range of clinical and clinical support professions in the workforce.

In 2019, the four SCHI partner organisations committed to "Excellence in cross-sectoral interprofessional education across the continuum of learning" through the development of research and education in interprofessional education (IPE) and interprofessional collaborative practice (IPCP).

Purpose

SCHI provides an ideal setting for the integration of IPE and IPCP across clinical practice and education, for the clinical and clinical-support workforce, from pre-registration students to experienced practitioners. However, a unified approach to IPE and IPCP across the partner organisations was lacking and few education faculty had specific skills in conducting IPE activities. The SCHI context also provided the opportunity to breakdown professional and organisational silos, as well as the silos that exist between clinical and clinical support health roles. The overarching goal was to align activities to provide high-quality IPE experiences, which support IPCP and ultimately improve clinical practice, patient-centred care, and patient outcomes.

This project aimed to develop and implement an intersectoral response to the need for workforce education, faculty development and capability in IPE and IPCP across education and clinical practice settings.

The focus was twofold; to provide a uniform understanding of IPE and IPCP and, to upskill health professions education faculty in design, implementation, assessment, and evaluation to conduct IPE activities.

Design and description

The decision to offer online learning mode was a deliberate strategy to overcome the well-recognised pragmatic challenges to IPE, such as resourcing and timetabling. In addition, engaging busy clinicians and clinical support staff in learning materials was likely to be enhanced using asynchronous approaches. This decision shaped the design of the modules.

Five IPE-4-IPCP online learning modules were developed. The content was informed by an earlier project in which a systematic search of the literature informed a series of scoping reviews (n=4) and resulted in the development of a best practice framework. A series of qualitative interviews with Australian and international leaders in IPE practice and scholarship were also conducted to augment the content.

The Introductory IPE-4-IPCP module is designed for all health care staff, health education faculty and health professions students across the SCHI partner organisations. It provides a global view of IPE and IPCP, the overarching approach and IPE competency framework adopted for SCHI and outlines some enablers and barriers for IPE. This module aims to support individuals to recognise collaborative practice competencies, and to develop confidence in their ability to engage in IPE and IPCP within a health care team.

The four IPE-4-IPCP Domain-specific modules are designed for health education faculty (those who have informal or formal teaching roles whether academics, educators, clinicians, or clinical support professionals) and address the development of skills in education domains of IPE: design, implementation, assessment, and evaluation. A research assistant with extensive education experience, developed the modules (guided by an interprofessional team with

representatives from each of the SCHI partner organisations) using Easy Generator software. This learning management system enabled access to the staff and students of the four partner organisations, The duration of these modules varies from 30-75 minutes of engagement time.

Care was taken to ensure constructive alignment between stated intended learning outcomes and assessment activities. Two pedagogical approaches were used:

- direct instruction in which content is delivered via an online learning platform including embedded video segments, narrated slides and quizzes
- reflective practice whereby self-learning is encouraged through case examples, reflection activities and exercises including for example multiple choice, mix and match, completion of reflection responses.

Following ethical approval each module underwent a rigorous process of validation for content and design by expert and end user panels. Module content and design improvements were attended to prior to implementation prior to implementation.

Implementation

Pilot implementation of the finalised modules was undertaken over a three-month evaluation period. The implementation had the support of the SCHI Executive who represent each of the partner organisations. The chosen learning management system (Easy Generator) facilitated smooth implementation of the modules and overcame any anticipated issues with access such as organisational firewalls that have been identified as problematic in this setting previously.

Recruitment strategies were conducted at SCHI and internally within the partner organisations including electronic posters, PowerPoint screen savers, and promotion in school, service group and discipline meetings. The IPE-4-IPCP Introductory module was embedded for students in undergraduate programs as either a mandatory or elective learning activity depending on the course and partner organisation policies. Staff with teaching roles, across all the SCHI partner organisations were invited to continue to the IPE-4-IPCP Domain-specific modules on completion of the IPE-4-IPCP Introductory module.

Implementation beyond the evaluation period is ongoing.

Evaluation

We aimed to develop and implement a cross-sectoral response to the need for workforce education, faculty development and capability in IPE and IPCP across education and clinical practice settings. Overall, the results of the pilot indicate that the IPE-4-IPCP Introductory online module provides a uniform understanding of IPE and IPCP and that the IPE-4-IPCP Domain specific modules provide a set of resources to upskill health professions education faculty in design, implementation, assessment, and evaluation enabling the conduct of IPE activities.

Multiple levels of evaluation were conducted in this pilot and this evaluation model may provide guidance to others evaluating similar projects. Participants complete pre- and post-module questionnaires for each module. The IPE-4-IPCP Introductory module questionnaire includes perceived confidence in knowledge and ability to engage in IPE and IPCP within a multidisciplinary team [1] and the Interprofessional Socialisation and Valuing Scale (ISV-9a and

ISV-9b)[2]. The IPE-4-IPCP Domain-specific Module questionnaires include items relating to desired educational outcomes using the Kirkpatrick's model of program evaluation [3]. All IPE-4-IPCP module participants are invited to complete short, embedded learning activities (quizzes and reflective activities) within the modules and their responses also contribute to module evaluation through thematic analysis [4] to reveal deeper insights about the effectiveness of learning within the modules. The uptake and user acceptance of the IPE-4-IPCP Introductory and Domain-specific modules is assessed through data analytics drawn from Easy Generator and a series of brief questions that reflect eight user acceptance constructs.

A number of lessons have been learned from this pilot implementation. Despite having SCHI Executive leadership support, funding and agreement on the value of the project, changing or unfilled positions of lead staff on the project team meant varied levels of engagement and uptake of the modules across partner organisations. The COVID related clinical workload pressures at the SCUH during pilot period may have also impacted uptake. Implementing this project across four partner organisations has also highlighted the structural and functional challenges in intersectoral partnerships.

Future focus

The focus of the next stage of this work is to improve uptake by advocating that the the IPE-4-IPCP Introductory module becomes a mandatory requirement for on-boarding staff and students of all the SCHI partner organisations. While the IPE-4-IPCP Domain-specific modules will be promoted as a micro-credential for staff involved in formal and informal teaching roles. Further investigation will determine the best means to make the IPE-4-IPCP online modules available to other organisations.

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Interprofessional education (IPE)

Experiences from a health professions educator

Case Study 2

Title

Internal and external IPE: creating collaborative practitioners.

Authors

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Omar Pervez, Lead Clinical Supervisor – Chiropractic, Central Queensland University

Key Themes:

Interprofessional education, collaborative practice, community outreach, inclusive care

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Context

Central Queensland University (CQUni) is a regional University with multiple campuses across the Australian states of Queensland, New South Wales, and Victoria. The University provides flexible learning modes and serves a sizeable proportion of non-traditional students (first in family, low socioeconomic status (SES), minority groups and those with accessibility challenges). The College of Health Sciences within the School of Health, Medical, and Applied Sciences is home to a suite of allied health courses including Chiropractic, Physiotherapy, Oral Health, Allied Health, Podiatry, Occupational Therapy, Speech Pathology and Exercise Sports Science. These courses are located across multiple campuses in Queensland. We share experiences in IPE based around activities undertaken in Brisbane (Turrbul and the Yuggera lands) between Chiropractic and other allied healthcare students studying in the same location.

The disciplines participating in our IPE activities were selected purely based on location and will likely grow and change in the future as more disciplines join the multidisciplinary health clinic in Brisbane. The chiropractic and physiotherapy students attend multiple community outreach events together which creates opportunities for students to engage with and learn from other healthcare students and qualified practitioners, however, this element is not controlled by CQUni staff as it is dependent on who attends each event.

Chiropractic students enter the clinic when they are in the final year of their extended Master's degree, while Physiotherapy and Nutrition students enter as part of their final year placements in their BSc (hons) and BSc degrees, respectively. Chiropractic students have quantitative

requirements in relation to time (over 500 hours of clinical placement) and clinical interactions (new patient consultations, follow up treatment numbers, neuro/ortho examinations, systems examinations, radiology reports, rad positioning etc.) they attend the student clinic for 12 months 4 x 4-hour shifts per week and are required to complete 15 hours of community outreach as part of their training. Physiotherapy students attend their musculoskeletal rotation (set time allocation) 4 days per week for 5 weeks before moving on to their next rotation. While Nutrition students must do a 100-hour placement. Physiotherapy and Nutrition do not have a mandated community outreach requirement.

Our IPE program is evolving and changing as and when new opportunities arise within the university and also with the external organisers. In 2022, we attended 10 IPE community outreach events. Due to the dynamic nature of our IPE activities and the overriding desire for the experiences to be authentic, chiropractic students are not directly assessed at any one event but rather are assessed through a continuous assessment known as an Overall Clinical Competence Assessment (OCCA). The OCCA is completed twice during a term once formatively and once summatively. It looks at a range of clinical competencies but in relation to this exemplar assesses professional behaviour in relation to collaborative care and patient centred evidence-based management. For our internal IPE activities students are required to complete a reflection on the complex case discussions exploring the different approaches discussed by the different healthcare professionals present in relation to patient centred care.

Purpose

The rationale behind growing the IPE experiences at CQUni chiro was mostly centred around maximising opportunities for our students to become more well-rounded practitioners. As evidence-based guidelines continue to reinforce the importance of patient-centred care within multidisciplinary settings, it was important that we find opportunities for our students to engage and learn with other healthcare professions. IPE has allowed our students to build up their clinical case mix experience and in turn their confidence. It has also allowed them to better understand the roles and in turn contributions other health professions can make in a patient-centred environment.

Internal IPE has provided opportunities for students to gain a better understanding of other health professions and multidisciplinary care. The IPE events focused on the following growth areas for students:

- Better understanding the role/scope of other health practitioners
- Learning different or new techniques, lifestyle advice, and management strategies within a biopsychosocial framework from allied health peers
- Understanding how different health professions approach a similar clinical presentation and why that might be
- Communicating with other healthcare professionals
- Co-managing patients.

External IPE combined with community outreach has provided many unique opportunities for students to build their skills and knowledge in an authentic setting. The IPE events focus on the following growth areas for students:

- Improving time management
- Improving interprofessional communication skills
- Developing wider context understanding of social determinants of health
- Applying clinical reasoning with various demographics in various settings
- Developing consultation skills (history, examination, diagnosis, and plan of management)
- Identifying appropriate patients for referral and/or co-management.

Design and description

Design principles

The design principles we used were related to authentic learning, it was important that each event provided the students with pragmatic opportunities to develop the skills and knowledge that they would need upon graduation. This meant ensuring a good case mix of real-world conditions that could/would likely present to them in clinic but also building soft skills around communication and working as part of a multidisciplinary team for patient betterment. As mentioned previously, the guidelines are increasingly supporting multidisciplinary care, thus finding ways to engage with other professions in a meaningful way where each profession is able to take away something new from interactions was important. Chiropractic has traditionally been a more standalone discipline than some of the other health professions, so working together has allowed other disciplines to better understand what chiropractors can do and how they can contribute. For noting, the external IPE activities offer a range of opportunities for students to engage with healthcare students from other healthcare disciplines and qualified healthcare professionals, these are determined on the day and are not something that CQUni has influence over.

Key personnel

- CQUni Clinic Manager - communication with external stakeholders and memorandums of understanding.
- Chiropractic Clinical Lead – consulting with the clinic manager and the clinical education outreach supervisors to ensure staffing and equipment is properly allocated.
- Chiropractic Head of Course – assisting with the pedagogical and curriculum elements of the IPE.
- Clinical Education Outreach Supervisor – consulting with students, arranging event logistics and attending events.

- Lead Physiotherapy Clinic Supervisor – consulting with students, arranging event logistics and attending events.
- Nutrition Head of Course – consulting with Head of Courses (Chiropractic and Physiotherapy), Chiropractic Clinic Lead and CQUni Clinic Manager to ensure student schedule and participation, and overseeing nutritional advice provided.

Activity facilitation

- Identifying opportunities and making contact
- Resourcing the outreaches with staff and portable equipment
- Creating a protocol for students to take leadership roles.

IPE - Activity	Internal – CQUni Health Clinics based	Core
Complex cases – multidisciplinary approach – timetabled and students from interested disciplines are invited to both attend and nominate a case	1. Each term a complex case from the student clinic is selected from cases nominated by the students. 2. A panel of healthcare professionals/academics is/are assembled usually 3 or 4 (ex/orthopaedic surgeon, psychologist, pharmacist, general practitioner, nutritionist, podiatrist, physiotherapist, chiropractor and or an occupational therapist) by the unit coordinator. These are invited speakers who volunteer their time, some are from within the university staff, and some are external practitioners who have expressed an interest in being part of the program. 3. The panel is provided with the de-identified case notes one to two weeks before the online gathering. (de-identified by the intern and distributed by the unit coordinator) 4. At the complex case discussion, the treating intern presents a brief summary of the case, challenges they faced and then seeks the views of the external guests. 5. The external guests discuss the case, provide thoughts from their professional perspective, ideas for ongoing care, different approaches if the patient is not improving. This discussion is facilitated by the chiro staff as and when required. 6. Students in attendance are encouraged to ask questions and share their thoughts. Generally, these last about 60 minutes but have been known to expand out to 90 minutes.	Chiro – yes Physio – optional Nutrition - optional
Working together	Chiropractic students are on placement from February to February each year. Physiotherapy students filter through the Indooroopilly clinic on 5-week placements. Nutrition students are also on shorter placements of varying lengths throughout the year. 1. When a new group of physio students are scheduled to attend the clinic, they are paired up with a chiropractic student. This is undertaken by the clinic admin team.	Chiro – yes Physio – yes Nutrition - optional

	2. The pairing will see them examine and treat each other as appropriate AND co-manage any patients that require the services of both disciplines. This is driven by the students and the clinic supervisors. Nutrition students are invited to sit in on chiropractic and physiotherapy initial consultations and then provide advice to the chiro/physio student about any nutritional aspects of the case that could potentially be addressed as part of the patients' care. The clinic supervisors inform the students when the nutrition student will be present, and they are encouraged to invite the nutrition student to attend a consultation, if they feel it would be useful, this is particularly encouraged for patients with chronic conditions and or comorbidities. The chiropractic and physiotherapy students were asked to identify common conditions that present to the clinic that they would appreciate having educational information to provide to patients. They were also asked to identify common nutritional questions that they get asked by patients. The nutrition students then set about creating educational material that both disciplines can use for the benefit of their patients. This was a joint effort between the clinic supervisors, the unit coordinator and the nutrition academic team.	
	External – IPE Community Outreach	
Community Partners	Churches of Christ • Demographics: **Senior Citizens, Sheltered living, Low SES** • Participants: CQUni chiro and physio students, other institutions podiatry students Homeless Connect • Demographics: **Homeless individuals** • Participants: CQuni chiro and physio students, registered general practitioners, oral health therapists and dentists, pharmacists, nutritionists and hairdressers, laundry services The Hub (Blackall Tambo and Beyond) and Ravenshoe Medical Centre • Demographics: **Regional communities** • Participants: CQUni chiropractic students (in-person both locations), nursing and medical team (Ravenshoe only), physio students (telehealth The Hub only)	

	Large scale community sporting events • Examples/Pan-pacific masters games, University Games, Polocrosse tournaments, Bridge to Brisbane, Australian Outriggers Canoe Racing Assoc, Brissie to the Bay • Demographics: **Active individuals** of varying levels and age groups 1. Students along with a clinical supervisor present to the site, meet and greet the organisers, set up the tables, speak to other providers and then prepare to provide care. 2. Students are required to perform full case histories, physical examinations, report of findings, gain informed consent and provide appropriate care in a timely manner. 3. Any patients who could benefit from referrals and or co-management are followed up appropriately to ensure that the patients receive the required care. This can take different forms, from walking the patient over to one of the other healthcare providers present at the event or writing a referral letter to the general practitioner upon returning to the student clinic, as examples. 4. Upon returning to the student clinic, students are required to write up a full case summary including relevant history, physical exam findings, differential diagnoses, working diagnosis, plan of management and prognosis. Developing these relationships took time and significant, sustained effort from the clinic manager, lead supervisor, the clinical education supervision team. The growth and connections often came from participants in one event asking if CQUni could send students to an event that they were helping to organise etc. more on this later.	

Implementation

Implementation of our IPE experiences has involved some minor challenges, these included:

- Finding other disciplines that wanted to undertake IPE with a chiropractic program.
- Staffing events within workload allocation
- Logistics of equipment and transportation
- Working together and understanding each other's roles.

Over the past three years, we have learned through trial and error how to continually improve within this arena. In the early days, chiropractic covered a lot of solo events, however, a point was made to invite other health disciplines along if they showed interest and wanted to participate. As time passed, CQUni physio was introduced at the Indooroopilly clinic, and they began to join the chiro team on their outreach activities. Then participants at the sporting outreach events started to invite the disciplines to attend other community-based service outreaches as detailed above, things just gradually grew from there to include other Unis and other health disciplines who happened to also attend the external community outreach events.

Staffing these activities has been a challenge and has required sessional support and good will from the discipline. In 2022, we were becoming overwhelmed with invitations to participate in events and had to revisit the focus of the IPE activity and become more selective with which events we attended. We are also looking at modifying our clinic internship model to increase the amount of community outreach time required of each student which would decrease the time required for staff and students in the student clinic. Thus, freeing up or re-directing time to attend these valuable events. We are now at the point where outreach events are confirmed for the entire year in January, which allows for improved logistical planning.

The other challenge has been around understanding each other's roles in patient care and triaging of patients at events. However, given the similarities between chiro and physio this was not a large hurdle to work through.

COVID-19 had very little, if any, impact on our IPE activities. The reason for the limited impact was partly down to Queensland having only short-term lockdowns after the initial closure of student clinics in late March 2020, until mid-May and thereafter only closed for the odd 1–3-day lockdowns. Chiropractic students do not attend Queensland Health (QH) placement sites and so did not fall under the guidelines and mandates for their student placements. The decision to allow students to continue to provide care in the CQUni health clinic was taken by the University which also supported the clinic staff to take students on outreach events that were still running in the community.

Evaluation

- Students are required to see a certain number of new patients and provide a certain number of regular treatment visits as part of the University clinical requirements. At an event, students must speak to the supervisor after undertaking the history and physical examination to gain permission to treat, they must have a working diagnosis and a plan of management that is justified. In order to gain a number for the patient encounter, a

student must have performed all aspects of a consultation including gaining informed consent and treatment (as appropriate) followed by presenting a written case summary to the clinic supervisors upon returning to the student clinic. This is consistent with what they would be required to do in the student clinic and allows the intern and the supervisor the opportunity to discuss the case. After an event overall case mix is recorded and reviewed to ensure students are gaining a range of patient encounters. These include things like age, gender, region, chronicity of complaint etc which is recorded for our purposes and reporting to our accreditation body. There is also regular communication with the sites that we visit to ensure that our services are meeting their expectations and students are also asked for feedback on events.

Success of the program is measured in a few ways: quantitatively - case-mix that students record for accreditation purposes ensure that the students have seen a wide mix of patients, their OCCA and professionalism assessments also inform our success measures. Qualitatively, the popularity of IPE from both students and external stakeholders, and student and stakeholder feedback which is sought after events are all measured for continuous improvement. Feedback from each event is discussed and used to modify future events as appropriate.

- On reflection, if all options were on the table, IPE between disciplines with different skills/scopes/strengths would perhaps bring more value to the patient experience and the collaborative efforts of a team. For instance, chiros and physios have quite similar skill sets so working together has provided them with:
  - Better understanding of the scope of the other's profession
  - Helped them remove pre-conceived notions about the other's profession.
  - Taught them new skills/techniques.

These learning experiences have been highly valued by the students.

However, adding a nutrition student into the mix allowed the chiro and physio students to provide additional care for the patient's betterment. If the end goal of the activity is to create more collaborative multidisciplinary care teams, then having them work with a profession that has a different skill set may allow them to better understand how they can complement each other's care, however, improving relationships between professions that are sometimes seen as competitors is also valuable. This reflection comes back to the end goal and what the activity was set up to achieve.

One final unforeseen benefit of IPE activities has been that it has allowed students to build a network of professionals they could work with after graduation. Students who graduate having experienced a wide range of social demographics and practitioners are provided with the opportunity to better understand the wider context in which their patients live, work, and receive care, which we feel will make them better practitioners. Given the shortage of allied health practitioners in Australia, if the roles of each profession are better understood, healthcare teams could be maximised.

Advice for those seeking to implement a similar IPE activity

Identify early what outcomes you need to achieve for your students, what resources you have at your disposal, other disciplines who may want to collaborate, reach out to organisations that work with underserved populations to offer service, and keep it small until you have worked out the kinks.

Future focus

As discussed above, our IPE activities are dynamic and changing as opportunities present themselves. The more disciplines we can involve in our IPE the better it is for our students and ultimately the patients they will care for. Our current future focus includes the following projects:

- Inclusion of occupational therapists, speech pathologists, podiatrists, and oral health in current outreaches.
- Finding medical degree courses willing to participate in IPE involving chiro and physio students with a focus on interdisciplinary communication for referrals and co-management.
- Creation of a combined psychology/chiropractic clinic for patients who would benefit from both disciplines. Given the growing association between musculoskeletal pain and poor mental health, it is anticipated that this collaboration will provide a much-needed service and a valuable learning experience.
- Development of a sonography, chiro, and physio service at sporting outreaches
- As far as communities that we work with, we are currently working on a relationship that would allow us to provide regular care to First Nations Peoples and to refugees and or asylum seekers in Brisbane, Australia.

Interprofessional education (IPE)

Experiences from a health professions educator

Case Study 3

Title

A snapshot of Interprofessional Education (IPE) efforts implemented in the Joint Medical Program, University of Newcastle

Authors

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Key Themes:

Patient-centred practice, rural, IPE champions

Context

The Joint Medical Program is run in partnership between the University of Newcastle (UON) and the University of New England (UNE). In the first two years, students undertake predominantly campus-based learning on three campuses in Armidale, Newcastle, and the Central Coast, and in years 3 to 5, are located across six clinical schools, including two rural locations managed by the University of Newcastle Department of Rural Health (UONDRH). The UONDRH supports students from all health professions to undertake professional practice placements in rural areas of northern NSW. Medical students complete rotations in two rural locations which are up to 3.5 hours from their main campus. The two Universities also host different groups of students, with UON delivering 14 allied health programs and UNE limited to medicine, nursing, pharmacy, and social work, predominantly delivered by distance learning.

This set of circumstances has created many challenges for the implementation of consistent interprofessional learning (IPL) opportunities for all students. Here, we describe two approaches which are part of a suite of activities offered across the program and designed to ensure that all students have some opportunity for interprofessional learning and socialisation to other health professions.

In contrast, students who are placed at the UONDRH have opportunities to take part in small group interprofessional activities hosted at the sites or delivered online. Staff from the UONDRH are academic educators from medicine, nursing and allied health who work

collaboratively in the design and delivery of these Interprofessional activities.

Purpose

Our overarching goal is to produce graduates who are prepared for collaborative, interprofessional and patient-centred practice. In the first year of the program, we have attempted to socialise students to other professions and build their awareness of the roles and scope of practice of various groups with a goal of breaking down, or even preventing the establishment of perceived professional silos. The intention of this is to encourage students to take up opportunities for interprofessional learning and practice which arise later in their programs, during clinical placement. This socialisation has occurred in the form of very large group events involving students from up to 10 health programs, all in their first year. Students work through a range of workshop style activities, which do not rely on any prior clinical or health science knowledge. Prior to the COVID-19 Pandemic, various iterations of these large events were run at both Newcastle and Armidale with varying success, largely limited by engagement given the need to avoid timetable clashes.

The UONDRH interprofessional learning program has been in place since 2001 with an aim of bringing students from a range of health professions together, in a small group format, to further develop their collaborative practice capabilities in relation to interprofessional patient-centred care. Medical students on placement in our region are usually co-located in student accommodation allowing for formal and informal opportunities for socialisation with students from a variety of professions. This often means that students participate in our activities with some prior engagement with students from other professions.

Learning objectives within the interprofessional activities align with the Canadian Interprofessional Health Competency (CIHC) National Interprofessional Competency Framework (2010), with each activity targeting specific competencies around interprofessional communication, patient-centred care, role clarification, team functioning, collaborative leadership, and interprofessional conflict resolution as relevant to the topic. The program delivers a range of activities and centres around both clinical and non-clinical topics.

Design and description

In designing these activities, the goal is not to replicate discipline-specific content, instead to provide students with an opportunity to learn “with, from and about each other” across a variety of activities. Activities are designed and delivered by an interprofessional team ensuring flexibility to meet the varying levels of clinical experience and year levels from each discipline. These activities are linked to the Canadian Interprofessional Healthcare Competencies, however, are not assessed as formal competencies. Table 1 summarises the activities as well as the similarities and differences between them.

Table 1 Summary of IPE activities

<table>
<tr><th></th><th>UON – large group events</th><th>UONDRH – smaller group modules</th></tr>
<tr><td colspan="3">Activity design</td></tr>
<tr><td>Learning format</td><td>Rotation through brief experiential activities based on areas of learning common to all programs (e.g., physical activity to promote awareness of lifestyle risk factors, yoga for self-care, a scavenger hunt for group problem-solving).</td><td>Rotation of activities each year including both clinical and non-clinical topics. Activities are scaffolded throughout the year so that students get to know each other as people, then as professionals, however each activity is discreet and does not rely on previous experience of IPL prior to attendance.</td></tr>
<tr><td rowspan="2">Design principles</td><td colspan="2">• To represent the spirit of IPL, content and activities are designed and delivered by an interprofessional team.
• Minimal didactic components to maximise active participation by students.</td></tr>
<tr><td>• At this early stage of students' learning it is important that the activities don't rely on clinical or health sciences knowledge.
• Build-in flexibility in terms of student numbers and professions represented.</td><td>To ensure authenticity of the learning content, don't try to force the topic to apply to all professions if it isn't clinically or professionally relevant.</td></tr>
<tr><td colspan="3">Activity implementation</td></tr>
<tr><td>Key personnel</td><td>Events rely on a key champion among the academic staff but also, need a lot of professional staff support, as well as active involvement of staff from each of the participating disciplines/professions. Student volunteers (particularly more senior students from the participating programs) have been central to the running of large group events.</td><td>Activities are usually led by one academic staff member with staff from other disciplines co-facilitating where practical and relevant. While not always feasible, it is preferable that those professions that the activity is targeted towards are involved.</td></tr>
<tr><td>Student numbers</td><td>The initial event divided students from 10 programs across two timeslots on a single weekday – the largest of these was attended by 170 students.</td><td>Variable from 15-80 including a mix of years 3,4 and 5 medicine and allied health and nursing (from year 1 onwards).</td></tr>
</table>

Types of activities	Non-clinical, game-based activities were designed, drawing from key skills linked to each participating profession. Each activity had clear instructions and a task to complete in a limited time e.g., - Drawing on an iPad using a mirror with a series of triggers provided and team members required to identify the objects being drawn (link to oral health), - Estimating the sugar content of a range of drinks. Group task to achieve correct rank order (nutrition/dietetics), - Constructing a 3D model of a brain/torso (anatomy; all professions) - Webster pack with instructions – task was to correctly fill the webster pack with the faux medications provided (Pharmacy) - Blindfolded obstacle course (pairs to work together – link to occupational therapy), - Swaddling and putting a nappy on a baby (midwifery) - Scavenger hunt with public health-based clues (all professions)	Novel – non-clinical activities such as escape rooms (described previously by Ferns, J. et al 2022) which are game-based activities where the emphasis is on teamwork, communication, leadership, and conflict management rather than clinical skills. Other non-clinical activities such as hackathons based on the models used in https://hackingmedicine.mit.edu/about/ Health Care Team challenge (hybrid model cross site initiative) based on Health Care Team Challenge (ref http://www.healthfusionteamchallenge.com/) Case-based learning around a diagnosis e.g., CVD Clinical-based topic with elements of experiential learning e.g., cancer/Parkinson's disease.
Costs	Costs predominantly consist of staff time for planning and delivery. Planning, delivery, and evaluation all take time; however, this is incredibly valuable. This needs to be prioritised and supported at an institutional level	
	In addition, the large group socialisation activities were supported by the faculty to cover some consumables (craft items associated with activities) and catering as sharing a meal was seen as an important part of these events.	Morning or afternoon tea is provided as part of the IPE activities to foster non-professional relationships and rapport between students and academics.

Implementation

In implementing any interprofessional learning activity, challenges related to number and discipline mix of both students and staff need to be carefully managed. Student attendance can vary due to conflicting demands and relative priority/interest that students place on IPE (IPE is generally programmed but not compulsory for students on placement and attempts to make these activities compulsory in early years are often hindered by timetable clashes). Variable numbers mean that activities and staffing need to be flexible to cater to both overall group size in addition to the ratios of specific disciplines in attendance on the day. Staff factors including availability, facilitation skills and interest in IPE also impact on successful delivery. The establishment of local IPE champions (academic staff) has increased confidence in the design and delivery of activities.

Large group, early program events are also plagued by the challenges associated with identifying activities relevant and appropriate for all programs at the beginning of the learning journeys. The identification of common learning objectives and goals across programs, such as those addressing lifestyle risk factors, self-care, communication, teamwork, and problem-solving skills, and basic first aid has helped to inform the development of activities that all students can actively engage in.

The large group events were halted entirely during covid, and we have as yet, been unable to return to these large group events due to a combination of staff capacity and limitations on large group gatherings. The transition to remote delivery of smaller group UONDRH learning activities during periods of lockdown was eased through prior experience in online delivery due to the geographic spread of our sites. Utilising built-in platform features such as breakout rooms, screen sharing, and whiteboards, enhanced the success of small group activities. Additional interactivity was enabled through other digital tools and platforms to incorporate activities such as polls, quizzes, and student-generated word clouds. Central to the success of this was staff training and familiarisation with all platforms being used.

Evaluation

Each interprofessional activity undertaken in the program is evaluated with a focus on student experience as it relates to the CICH Interprofessional competencies framework as well as overall satisfaction with the event. Students are asked to comment on the extent to which they enjoyed and feel that they learnt from the activities, developed teamwork skills, were encouraged to interact with students from other professional programs, the relevance to their learning, and in some cases have been asked to complete the Readiness for Interprofessional Learning Scale [RIPLS]. Response rates unfortunately tend to be low, with less than 30% of attendees at the large group events completing feedback. A research project to evaluate the IPE activities conducted through the UONDRH commenced in January 2023. The evaluation asks students to rate their level of agreement with statements as to whether the activity gave them an opportunity to experience or practice skills related to the Canadian Interprofessional Health Competencies (ref CICH, 2010). To date 164 of 198 eligible students (83%) have completed the evaluation for IPE activities with 97% agreeing or strongly agreeing that they would encourage other students to attend IPE.

Staff reflections following activities add to the evaluation process along with informal debriefing, which provides opportunities to note activity successes and areas for improvement. This

evaluation process ensures that activities remain current and relevant for health professional education. Student feedback supports the value of ensuring a mix of professional involvement, with limited diversity of student and staff participants representing a threat to the authenticity and value of learning experiences.

Through our collective experience facilitating IPE since the early 2000s we have come to appreciate the importance and value of the timing, the frequency, and the level of interactivity within any interprofessional education we deliver. This strategy is helpful in maximising student engagement from those who are ready and willing to participate in interprofessional learning. Focussing on these elements can also be useful for creating an environment to engage those students with a limited understanding of and/or interest in interprofessional learning, to be able to learn with, from and about each other. While we don't have data to support impacts on clinical practice, positive attitudinal change, and improvements in readiness for interprofessional practice point towards an increased receptiveness to future learning and practice opportunities.

Future focus

We are looking to revisit the early socialisation events and opportunities, perhaps finding a middle ground between attempts to engage all students from all programs at once and limited very small group sessions. This is already occurring in some parts of the program, with the involvement of a range of health professionals in briefing medical students for a multidisciplinary team meeting role-play and involving Nursing students in some problem-based learning tutorials for medical students.

Interprofessional learning activities have traditionally been promoted by staff. In future we will be trialing the inclusion of a student voice, using quotes and video footage from past students to enable an element of peer-to-peer promotion. As we now transition back to in-person activities we will be incorporating key learnings from our experiences with online interprofessional education in terms of both design and delivery to maximise opportunities for students to engage in IPE in a variety of settings.

We welcome the acknowledgement in the AMC standards that 'Teaching, learning and assessment experiences may differ according to local adaptation' as this underpins the essence of our experiences; it is important to offer flexible activities and to modify offerings for different contexts. We aim for students to have a range of interprofessional learning opportunities in which they can engage in different settings, and to include socialisation activities early in the program to promote their receptiveness to these opportunities.

Finally, we continue to pursue an aspiration to incorporate more formal assessment of students' teamwork and interprofessional practice skills into clinical and workplace-based assessments. The ideal model is likely to be a longitudinal portfolio-style assessment stream involving students' reflections on interprofessional learning opportunities throughout their program, as well as observations of real or simulated clinical practice.

Interprofessional practice education (IPE)

Experiences from a health professions educator

Case Study 4

Title

Interprofessional learning activities for the workplace setting

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Key Themes

Interprofessional learning, workplace learning, clinical education

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Context

The University of Sydney is located in Sydney, Australia. The University's mission is that all health professional students will graduate capable of working in healthcare teams to deal with the challenges of improving health and wellbeing in the 21st century. The Faculty of Medicine and Health (FMH) has over 12,000 students enrolled and offers the largest range of health professional degree programs within Australia. In 2021, the FMH launched their 'Interprofessional Learning (IPL) Strategy' in which the mission and vision of IPL was enacted. The aim is to facilitate collaborative teamwork to ensure the delivery of high quality, culturally safe, person-centred care to improve health outcomes for patients/ clients.

This suite of interprofessional learning activities has been developed to take place within the workplace setting. Here, the workplace setting is defined as any setting in which students undertake the placement component of their degree program. The workplace settings are broad ranging and can include, for example, hospitals, community and primary healthcare, non-government organisations, private practice, aged care facilities, schools, and the disability sector.

The IPL activities described within this exemplar are relevant to all organisations involved in developing the future health workforce, *regardless* of the range of professional programs offered. The flexibility and adaptability of the activities means they can be implemented through engaging students from different organisations, along with drawing on the professional diversity found within many workplaces.

Purpose

The workplace setting is ideal for healthcare students to develop the necessary capabilities required for interprofessional practice (IPP). Within this context students experience authentic interactions between healthcare professionals – both positive and negative, providing rich learning experiences (Nisbet, O'Keefe & Henderson, 2016). There are many examples within the literature of structured IPL placement programs, for example, student training wards (Jakobsen, 2016), structured workshops (Kent, Courtney & Thorpe, 2018) and hospital-based IPL programs (Nisbet et al., 2009). However, these more *structured* IPL programs are often bespoke with small numbers of students participating, logistically challenging to timetable, labour-intensive and therefore difficult to sustain. To date, few educators have considered utilising the *informal* IPL opportunities present within the workplace to overcome the above-mentioned challenges. Yet, at any one time, students may be interacting with students and staff from other professions as part of their everyday workplace activity. For example, corridor conversations between a student and another staff member to clarify care provided, participating in a patient/ client handover to ensure a smooth discharge and conducting a holistic patient assessment to efficiently share information in 'real time'. This case study describes a feasible, scalable and sustainable approach to promoting workplace IPL that capitalises on these informal workplace interactions and provides students with opportunities to develop their IPP capabilities.

Design and description

Academics at the University of Sydney, in partnership with local healthcare providers, training organisations and networks[1] developed a suite of IPL activities for students to complete *whilst on placement*. The development of these activities, which were first piloted in 2015, was made possible through the Australian Government Department of Health Interdisciplinary Clinical Training Network Small Grant scheme. A University of Sydney Strategic Education Innovation grant (2016) enabled subsequent refinement. The IPL placement activities are listed in Figure 1. These five activities are broadly applicable across health and community sectors and can be incorporated into discipline specific placements, i.e., students complete IPL activities as part of their usual discipline placement.

1. **Interprofessional Observation Experience:** student takes part in a structured observation of an area of practice of a student or staff member from a different profession or vocation.
2. **Interprofessional Patient/Client Interaction:** students from different professions interact with a patient/client in providing a component of the person's care. Part 1: physical/mental health assessment or history-taking or home visit assessment or education session. Part 2 (optional): mind map/care plan.
3. **Shared Workplace Debrief:** students from different professions constructively critique the collaborative care elements of an occasion of interprofessional practice in a shared workplace.
4. **Patient/Client Experience of Interprofessional Care:** students from different professions listen to a patient/client's story of their interactions with multiple health, social care or other human service professionals.
5. **Interprofessional Structured Communication:** students from different professions come together to use workplace standard procedure to communicate about a patient or client's history, status or needs, and give mutual feedback.

(Nisbet et al, 2018).

Figure 1. Suite of IPL activities

The activities were designed to help students achieve a set of IPL competencies adapted from O'Keefe and colleagues (O'Keefe, Henderson & Chick, 2017). Each activity is linked to one or more of the following learning outcomes:

- Explain interprofessional practice to patients, clients, families and other professionals
- Describe the areas of practice of other health, social care and human services professions
- Express professional opinions competently, confidently, and respectfully avoiding discipline specific language
- Plan patient/client care goals and priorities with involvement of other health, social care and human services professionals
- Identify opportunities to enhance the care of patients/clients through the involvement of other health, social care and human services professionals
- Recognise and resolve disagreements in relation to patient/client care that arise from different disciplinary perspectives
- Critically evaluate protocols and practices in relation to interprofessional practice
- Give timely, sensitive, instructive feedback to colleagues from other professions, and respond respectfully to feedback from these colleagues.

The IPL placement activities are theoretically underpinned by socio-cultural learning theories that frame learning as situated in practice, participatory, and contextual (Morris & Blaney, 2010). Students are offered opportunities or affordances (Billet, 2001, 2009) to support their IPL. For example, having activities embedded within curricula, incorporating choice in which IPL activity is completed, with whom and when, and receiving guidance from educators. However, it is how students elect to engage with these opportunities that influences their learning (Billet, 2001, 2009). Through supporting reflective practice, the activities help students

question current practice and seek out new understanding, perspectives and actions for future practice.

The full resource package of activities and how to implement them can be found at https://www.sydney.edu.au/medicine-health/industry-and-community/collaborative-health-education-sydney-.html

Each IPL placement activity is structured with tasks for the student(s) to complete before, during and after the activity. Similarly, there are guidelines for placement educators, noting all activities are designed to NOT require the presence of the educator during the activity. The main role of the educator is to assist in facilitating student introductions between professions and to facilitate the post activity de-brief and IPL worksheet discussion. It is this de-brief that promotes deep learning.

Each IPL placement activity is designed to be completed within 30 minutes to 3 hours, with corresponding reflections of 30 – 60 minutes. All activities are designated a 'degree of difficulty', meaning curriculum designers and educators can scaffold the various activities to different student year groups if necessary. The final task for each activity involves students completing a worksheet. At the University of Sydney, this occurs via the University's online learning management system.

There is flexibility in how the IPL placement activities are incorporated into curricula. At the University of Sydney, some health disciplines stipulate certain activities/ numbers of activities be completed within a particular placement subject, year of study, or by the end of a student's program. For example, exercise physiology students complete one IPL activity of their choice in one of their final year placements. Physiotherapy students must complete any two activities anywhere across their four placements. In speech pathology, completion is optional, but encouraged for inclusion in their portfolio evidencing interprofessional practice capabilities. Medical students are required to complete the 'Patient/Client Experience of Interprofessional Care' activity as part of their interprofessional theme requirements. Additionally, placement educators occasionally implement the activities independent of any curriculum requirement.

There is also flexibility in how the IPL placement activities are assessed. At the University of Sydney, some disciplines use the IPL activities to contribute to overall placement competency in the areas of communication, teamwork, and patient centred collaborative care. In such cases, it is usually the placement educator who will review student worksheets and formatively assess them as part of their overall placement assessment process. Other disciplines request students submit their worksheets for summative assessment and use a satisfactory/ not yet satisfactory marking system. The FMH has also implemented an IPL ePassport system that gathers and records evidence of interprofessional competency across a student's degree program. A downloadable certificate documenting this achievement can be accessed throughout their degree. The IPL placement activities are recorded as evidence towards the ePassport.

Implementation

The IPL placement activities are now embedded within programs across six health disciplines at The University of Sydney. We have confidence in their relevance, authenticity and accessibility due to the extensive consultation and evaluation process with students, educators and academics engaging in designing, piloting then refining the activities. Our design research methodology enabled us to develop a set of design principles for others to use to guide future

IPL placement activities (Nisbet et al, 2018).

However, since the original implementation, there have been challenges:

De-commissioning of the public website and associated external platform that housed the suite of IPL activities as writable and downloadable PDFs

This de-commissioning occurred due to a change in security related University policy and resource allocation in accessing such public website platforms. Since then, the University of Sydney has built a similar alternative through its learning management system. Whilst this works for University of Sydney staff and students, it has meant external educators and other universities no longer have access to an interactive site.

To address external educator access, we have provided access through the following channels. The IPL activities are available as a static PDF document via a public-facing University of Sydney webpage (https://www.sydney.edu.au/medicine-health/industry-and-community/collaborative-health-education-sydney-.html). The resource is also available via the ClinEdAus website (https://www.clinedaus.org.au/topics-category/how-to-support-student-transition-to-an-ipe-208).

Buy-in from disciplines and placement educators

We had anticipated that most healthcare professional disciplines within FMH would have, by now, implemented the IPL placement activities into their placement curriculum. This has not been achieved for a range of reasons; COVID-19 disruptions, general workload pressures for both academic staff and placement educators, placement educator engagement with the learning activities which require the educator to provide feedback and debrief with the student, and limited resources in constantly championing and driving the implementation. In addition, COVID-19 created greater workload pressures for both placement providers and academics, further reducing capacity for considering alternative IPL initiatives.

To increase buy-in, several strategies have been introduced or are being considered. For example, the IPL activities now feature as part of the Faculty's IPL facilitator development program which is attended by placement educators, clinical teaching fellows and academics. In the future, we aim to better promote the IPL activities by developing a marketing plan and developing short promotional videos, hosting networking events and running regular professional development on how to use the activities. Furthermore, it is also important to ensure student effort is acknowledged via the provision of timely feedback on assessment tasks. This requires an appropriate acknowledgement and resourcing in academic workload of the time required for this task.

Limited opportunities within some private practice contexts and professions

Feedback from some health professional disciplines has identified challenges in embedding the IPL activities within uniprofessional private practice settings, for example a dental practice or a physiotherapy practice.

To address this challenge, we have encouraged academics and placement educators to 'think outside the box' in terms of modifying the activities. For example, dental students in private practice could complete activities with dental nursing students or contact a pharmacist by

phone to clarify medications; physiotherapy students could be involved in contacting a general practitioner in relation to a referral then debrief with their educator afterwards. Most students on placement would be able to interview a patient/ client on their experience of their health care journey.

Leadership and oversight of the IPL activities at the University level

Sustainable IPL requires strategic leadership in setting direction and championing change to embed, promote and drive further interprofessional development. Up until 2021, this leadership was undertaken by a handful of passionate academics, largely as part of their university service and leadership. Whilst this achieved some progress, a clear University and Faculty co-ordinated strategic direction, including adequate resourcing, was lacking. This particularly hampered expansion of IPL within the placement setting.

In 2021 the FMH invested in an IPL Academic Leadership role to facilitate the development of curricula to enable all health professional students to graduate with interprofessional practice capabilities. Part of this remit is to strengthen placement IPL opportunities. Strategic IPL leadership has provided direction and acceptance of IPL whereby IPL (including placement IPL) is now a critical component of curricula discussions across the faculty. Regular discussions with the FMH Associate Dean (Education), for example, provide a valuable opportunity for the IPL Academic Lead to share information about teaching and resourcing requirements, IPL facilitator training initiatives and the scope and outcomes of newly implemented IPL activities.

Evaluation

At the University of Sydney, we use several markers to evaluate the success of IPL activities. These include the collection of metrics pertaining to the number of students engaging with the activities, the number of degree programs that are using the activities as assessable tasks and, the number of units of study that assess the quality of student submissions as opposed to simply making a submission mandatory. For example, in 2022 close to 1000 students across seven-degree programs submitted worksheets for review.

Staff engagement is monitored via the number of staff who participate in IPE facilitator training, which includes training in how to use the suite of IPL placement activities. An IPL facilitator database has also been established and is regularly updated following IPL facilitator training workshops. To date we have had over 90 IPL facilitators register on the database since 2022.

We have also learnt several lessons from our experiences that might help to guide others in the implementation of IPL placement activities. These include:

- Providing a clear rationale for inclusion of the IPL activities to all stakeholders – students, placement educators and academics. This is critical for initial buy-in and ongoing support.
- Ensuring adequate administrative education support, for example to assist with tracking activity completion, collation of assessment results, promotion and evaluation. This is a necessary, but often unrecognised component of program implementation.
- Having easy to use technical systems in place to ensure seamless use of the IPL activities for all stakeholders. This is critical for ongoing use by all stakeholders.

- Prioritising facilitator training (placement educators and academics) including follow-up discussions and the development of an IPL facilitator database. Follow-up is particularly important to maximise uptake from the initial training.
- Adequately resourcing the ongoing momentum of engagement to sustainably implement IPL within placement sites. This includes having a formalised promotion and roll out plan for the IPL activities and capitalising on existing health-education partnerships to promote more widely.

Future focus

The next steps to further improve the uptake and use of the IPL activities include addressing the following issues:

Connecting students

Connecting students across professions is a key benefit of the IPL activities, that contributed to the development of their ability to work collaboratively. However, the system at our university for managing student placements is profession specific, making it challenging for cross-profession planning of these activities. To address this, we are in the process of implementing systems to provide details on the various professions at each placement site at any one time.

IPL activity development

Currently, most activities are conducted face-to-face. However, there is scope to explore virtual implementation. Opportunities to develop further activities that are more specific to some disciplines than others, for example dentistry, public health and oral health, are now being explored.

Wider access and dissemination

Future focus should include development of a publicly available interactive website that would benefit *all* universities and placement providers. Having a central location for educators and students enables sharing of the valuable resources and also streamlines their use by educators, facilitators and students. In turn, this enhances informal IPL activity uptake and strengthens the IPL community.

Impact evaluation

Further research into the educational impact of the IPL activities is warranted and is now considered a priority in alignment with the need for high quality, authentic evidence-based interprofessional education. Whilst this has been done for IPL activity 1 (Kent et al., 2019), there is limited research related to the other activities.

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Interprofessional education (IPE)

Experiences from a health professions educator

Case Study 5

Title

Allies in Indigenous Health II

Authors

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Key Themes

Anti-racism, Indigenous health, collaborative leadership, advocacy

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Context

The Faculty of Medicine, Nursing and Health sciences and Faculty of Pharmacy and Pharmaceutical Sciences at Monash University are large, with students across five campuses in Victoria, a campus in Malaysia, and numerous international partnerships and co-operative ventures. The health professions represented in the faculty are medicine, midwifery, nursing, nutrition and dietetics, occupational therapy, paramedicine, pharmacy, physiotherapy, psychology, radiography, radiation therapy, ultrasound, and social work. Courses vary in length from two-year postgraduate entry courses to five-year undergraduate entry courses. Monash University has a faculty wide Collaborative Care curriculum framework, with learning targets at the novice, intermediate and entry to practice level. Monash University also align curriculum to the Aboriginal and Torres Strait Islander Health Curriculum Framework, which helps higher education providers develop curricula for their health programs.

Senior level students across all the health professions can participate in Allies in Indigenous Health II. This is a 11-hour, semester long, online anti-racism module which is completed by students while they are undertaking their clinical placements in the senior years of their respective courses.

The learning outcomes for this module are:

- Design practical strategies to enable ongoing self-reflexivity in a professional context.
- Develop strategies for mitigating the potential challenges of different cultural values and behaviours between Aboriginal and Torres Strait Islander clients and mainstream health care practice.
- Generate strategies for incorporating anti-racist and affirmative action approaches in health care practice.
- Develop strategies for redressing inequity in health care for Aboriginal and Torres Strait Islander individuals, families, and communities.
- Advocate for equitable health care for Aboriginal and Torres Strait Islander clients
- Propose strategies to minimise risk and error through collaborative practice.
- Communicate with other professionals in a respectful, responsive, and responsible manner.
- Demonstrate strategies for dealing with conflict in health care.
- Recognise and apply leadership principles that support collaborative practice.
- Critically evaluate protocols and practices in relation to interprofessional practice.

Purpose

Racism is systematic in healthcare, and an interprofessional collaborative system wide approach is needed to advocate for change. This online module was first offered in 2021 with seven health professions; in 2023 this has expanded to have twelve health professions represented.

This module combines entry to practice learning outcomes from both the Aboriginal and Torres Strait Islander Health Curriculum Framework and Collaborative Curriculum Framework. Students are required to work together through a case, to identify the multiple acts of racism experienced, propose appropriate responses and advocate for change.

Design and description

Allies in Indigenous Health II is an online module with a combination of synchronous team and asynchronous individual tasks. The design of the case study narrative was led by the Gukwonderuk Indigenous Health unit located at Monash University and employed a dedicated health professional academic part-time to build the learning resources. The resources developed included multiple videos, media articles and correspondence letters. Learners are placed in interprofessional groups of eight and are required to self-organise three team meetings together over a 12-week period. Students are directed to complete multiple tasks related to a series of racist interactions experienced by Kallara, a fictional Indigenous patient. Students complete three key tasks within their meetings together: discussion of the challenges in team communication they may have observed within their own clinical placements, write a letter to the health service identifying how Kallara's health care interactions were culturally unsafe, and propose system changes that could be implemented to prevent negative interactions from being repeated.

The design principles are underpinned by gamification[1] whereby emotional, cognitive, and behavioural student engagement is strategically embedded. Students are given reasonable autonomy within the module, given the variability in health professions within each student team. This is a mandated component of the curriculum and offered each semester, with some large cohorts (e.g., medicine) needing to be split into either Semester 1 or Semester 2.

Implementation

This resource required approximately 18 months of development time by a health professional academic working closely with the Gukwonderuk Indigenous Health Engagement Unit. Once implemented, ongoing staffing for facilitation of the module is on average 1-2 days per week of facilitation by a staff member of the Gukwonderuk Indigenous Health unit, in addition to regular follow up and support by lead staff within each of the independent health professional courses.

Any new interprofessional curriculum is faced with the challenge of finding opportunities in the timetable that allow students to come together. We overcame this challenge by asking each individual team of eight students to determine amongst themselves the best time for the online team meetings. Students typically scheduled a 6pm time slot, given the tendency for students to be on clinical placements during their final years.

This activity was initiated during the COVID-19 pandemic restrictions, so students were well skilled in the planning and facilitating of meeting others on Zoom, and screen sharing to work on tasks together.

Evaluation

There are several components to the evaluation strategy. A pre and post anti-racism quiz was collected in the early iterations of the module, and an end of module evaluation survey is completed with the opportunity for qualitative feedback. Evaluation questions include the clarity of the learning content, the usefulness of the resources, the effectiveness of the teamwork, the team communication and overall satisfaction.

Future focus

The final focus of this work is to standardise assessment across the health professions, so that different students are not assessed differently on the same work and ensure all health profession courses offered at Monash University complete Allies II. A future focus may be a longitudinal study to evaluate changes in attitudes and beliefs relating to racism in healthcare, and to understand how strategies developed during this interprofessional learning have informed or transformed practice.

Appendix 4: Perspectives of IPCP

Interprofessional collaborative practice (IPCP)

Consumer lived experience

This information was provided voluntarily by a health consumer who had contributed to the focus groups for the research component of the project "Developing a collaborative practitioner through strengthened accreditation processes".

To protect the consumer's identity, some personal aspects of the information has been deleted.

About yourself

I am a mother and grandmother and am on low-income support and am a volunteer worker, and a part time worker. My work is in the city, but sometimes I travel out, to community in other locations. Previously I lived in a regional area working in the community. I have a number of friends and family and we take to time to meet on a regular basis to check if we are all ok, most times we meet for lunch locally. We tend to meet up on a regular basis to provide support and advice each other and to ensure things are going ok. To date we are ok, but sometimes we are not, so we rally around to ensure we help as best we can.

Collaborative practice: What is working well?

At one stage I relocated to a regional area, to take up employment. Previously I lived in the city and the care I received by my GP, support staff was very good and excellent. I had been with this service for over 20 years. My family also uses this childhood GP as well. So, I was not very sure how good it would be when moving to a regional area to enable me to meet my medical needs.

I was diagnosed with a chronic disease and also needed some physiotherapy as well and am also [deleted]. This place had two medical services, I do note however they worked very well together, so when I could not for some reason see one medical services, I could pick up my care from the other.

The main GP service when I attended was very efficient and was very comprehensive, so I felt very confident with the service they were providing. I was managed by a number of GP's and allied health professionals, and they were very open and friendly and communicated well with me.

There were a number of behaviours that I was very happy with. The [nurse] educator took the time to explain to me the Medicare form that identified which Medicare care plans and item numbers and provided me with a copy of the form. She explained this was negotiable with the GP's. Also, they provided me with a physiotherapist who was a sport physiotherapist. He looked at my [deleted] and indicated to me that there were problems with [deleted] and that is why I had back problems and communicated in detail what the issues were.

Although I paid for this service I think because both the [nurse] educator and the sports physiotherapist took the time to explain my physical issues and the Medicare form and informed me that I had the option to negotiate with Allied health, I felt both confident and empowered.

The other GP also spoke to me about improvements to my health using alternative solutions such as turmeric and where I could obtain these herbs. I now grow my herbs as I am that kind of person and am interested in that. I felt that the treatment I received was excellent and these are workers that must travel long distances, so I appreciated how they worked.

This is not the case sometimes in the city, because I asked my GP if I could have a copy of my care plan, and they were very upset with me. I think they said we don't do that. So, I think as a result I have not asked again.

Future improvements

As a consumer, what do you see collaboration in healthcare looking like?

That the primary health care setting is working together in some way, so that they are in touch with the other services that are available so that there is a holistic approach to caring for clients/patients. Also provide information outside of their own service as well, targeted and non-targeted.

What kind of health care provider(s) do you wish to see?

I would like not only for myself but for my family and health educator/promotion person who took the time to educate people, health literacy is not something that all people know about especially men who wait until they are very unwell to attend a doctor.

Also, possibly a health consumer advocate/health navigator, especially if cannot read. There are lots of people in the community that cannot read. The cover this by saying "haven't got my glasses", "haven't got time I'll just take it home to read". Observing people or knowing people means you can pick up if they cannot read or English is not their first and only language.

Taking the time to understanding my physical disabilities, my physiotherapist has taken the time to get to understand a person. So, while I do not do any of the physio that he had suggested with the bands. He usually asks me about incidental physio, which is gardening,

Describe the attributes, behaviours, skills you would like to see?

Basically, for myself and my family having one GP or one GP service where there is not a high turnover of staff. It is difficult to develop a relationship, if the workforce is constantly changing. Also, I use my GP service on a regular basis and sometimes I do not recognise the receptionist or the doctor I am seeing.

My family and friends still attend the same medical centre, they attended as a child or have a long-term relationship with. This means they can be travelling over 50 kms to attend and wait 2 weeks to see the GP if he is not available.

With my other GP where I had a relationship, because of our relationship over many years, I think my GP was able to see that I was not myself and at one stage he said I should see the

psychologist. I had a number of sessions because I think I was not my happy self and my GP recognised that. The psychologist took me through grief and loss and [deleted] group therapy [deleted].

So, I think having a good relationship especially long time and really knowing the person means they most times recognise that you may not be your usual self. Holistic health/ person centred/patient centred and having people with a range of skills and possibly health educators/health consumers who could possibly assist navigating the health care system, because it is getting extremely difficult to manage it all now.

Interprofessional collaborative practice (IPCP)

Experiences from a health practitioner

Two further perspectives of interprofessional collaborative practice were provided by health practitioners in Australian health services. These perspectives are structured by providing some contextual information about the health service and reflections on what is working well, the challenges they face and future plans:

Health services perspectives	Page reference
Health service perspective 1: Mind the "Systems" gap: Navigating vulnerable patents across the care continuum. Deidre Criddle, Fiona Stanly Health Service, Western Australia.	See pages 90-92.
Health service perspective 2: The collaborative practitioner in paediatric and disability services. Melissa Locke, Paediatric Physiotherapist, Growlife Medical, Queensland.	See pages 93-95.

Health service perspective 1

Context

Title: Mind the “systems” gap: Navigating vulnerable patients across the care continuum

Author: Deidre Criddle, Lead CoNeCT MHE Complex Care Coordinator, Fiona Stanley Health Service.

Context

I work in an interdisciplinary team with vulnerable patient cohorts considered high intensity users of acute care health services. Our service is offered across the city metropolitan area to all public hospitals with an Emergency Department. We currently operate out of 3 satellite sites. Our “people” include patients with multimorbidity, those at the end stage of chronic disease, those with dual diagnosis (mental health and alcohol and other drug disorders), and those with disability (especially intellectual disability). While I am employed as a pharmacist – acknowledgement of the value of a deep understanding of medicines in medically complex patients – a large part of my role involves care coordination. Our team comprises of social workers, welfare officers, peer support workers, nurses, occupational therapists, physiotherapists, pharmacists, and a psychiatrist.

Our patients or clients are those who are fall between system gaps – be it health, mental health, alcohol and other drug disorders, disability, housing and/or justice. More often it is a combination of several of these. Our cohort includes people aged over 16 years – interacting with the adult health system. The average age for our patients dealing with mental health, substance use issues or homelessness is about 38 years old. For those with chronic complex comorbidities average age is 67 years. Many in the chronic disease cohort are at the end stages of chronic disease. All have significant psychosocial problems which hinders access to optimal care. Issues with care can range from overspecialisation (lacking coordination) to undertreatment (an inability to get the help they need when they need it). Almost all lack health literacy to understand the consequences of inaction and an inability to prioritise their health needs with an overwhelming lack of understanding of the need or value of having good primary health care. This is our goal – to get the people seeking help from urgent care – and embed them with their local community primary health providers.

Our referrers are hospital clinicians looking to support vulnerable patients across the care continuum. We focus on patients who are high intensity users of the health system – especially emergency services. We also support National Disability Insurance Scheme (NDIS) clients who are stranded in hospital due to lack of community supports.

What is working well?

Our biggest lesson is learning “where we fit” within each Health Service. Our value proposition

differs depending upon the location and what existing services are already in place and the patient mix we are aiming to support. We have established some excellent relationships with services that are already well established and who are keen for our offer of support. We do not wish to duplicate existing services and are keen to care coordinate in ways that support existing exemplars.

We have worked with Emergency Department staff especially the mental health and Alcohol and Other Drugs (AOD) teams, Office of the Public Advocate, Police, Ambulance Service, Community Mental Health and Primary Health Network linking with General Practitioners (GPs) who have special interest in mental health and AOD. As one GP put to me "We wouldn't need care coordinators or navigators if our health system worked collaboratively." Our team looks to establish local links – find those primary care providers who understand complexity and who are keen to assist patients who present with chronic complex health issues.

We always "ask" the patients and their usual supports where we can provide support. We do not force the issue – if our service is not accepted, we will not pursue patients. Engagement really is integral to our success and we have found our Peer Support Workers and Welfare Officers provide an excellent base from which to work with the most vulnerable patients. There is a greater trust with these individuals and through them we can slowly offer to engage the patient with services and teams and care with the advocacy and understanding that is rarely offered to these patients. We do our best to keep communication open and transparent at all times.

Setting up a new service – aimed at improving care across transitions is challenging. Working across that vacuum can be difficult as we challenge the status quo and ask teams to do things differently. Change is never popular, but we have chosen staff who are adaptable, and resilient aware of many possible futures and keen to facilitate interdependencies found within local contexts.

What challenges do we face?

There is a lack of appreciation of skills needed to work collaboratively – and an overestimation of the value of professionals working in the hospital system. People define multidisciplinary in terms of team working within a system. This exemplifies the silos that define our current care systems. There has not been enough respect – or resourcing given to primary care – and our system is now struggling as a direct result of this. Our most vulnerable deserve to be cared for both acutely, across care transitions and arrive home safely – with good handover to primary care. All of this could and should be done – if our system worked for patients. Value-based healthcare needs to be more than a motto – and this can be realised when system KPIs truly reflect our patients needs rather than our system directives.

There is an increasing awareness that not all the skills needed for comprehensive care can be provided by one specialty – or professional group – yet this is how we triage and treat. People become medical problems and their journey is defined by Diagnostic Related Group (DRG) codes and estimated dates of discharge. All based on data – and we haven't even started with Ai yet, while our students may be aware of the roles of different health professionals – having a real understanding of the value of others takes time and experience. Sadly, it is rare for clinicians to work with each other – even multidisciplinary teams often work in parallel rather than together – and usually (as mentioned previously) within the one system. So that real

understanding of the roles and opportunities which can be afforded – are rarely available in most health settings. There is also a huge need for professionals to develop a healthy respect for those with lived experience – or those who offer different supports which are not well understood by clinicians working with a medical lens. There is so much more that our healthcare professionals need to understand about the social determinants of health and the impact these have on our patients.

Our team is acutely aware that we need more Aboriginal health workers and we are keen to engage within our workforce. We are also aware that people with complex needs often have more issues than their health – and our system and our workforce do not respect the time or challenges outside the health sphere. While we may profess to walk with and ask What matters to you – it is still rare for patients to have agency – especially within the acute care system. We see many examples of frontline staff providing valuable feedback – that lines the walls of workshops. Clinical Senates operating across the country will tell you – these are great vehicles – but it seems they are left in the garage. Instead of spending money collecting wisdom and doing nothing with it – it would be fantastic if just some of those ideas got to see the light of day.

What do you see collaboration in healthcare looking like in the future?

Interdisciplinary with a real patient voice and patient centred outcomes actually being real instead of mission and vision statements. Peer support gaining traction and acceptance within the system.

What changes are you planning to make to improve the interprofessional teams in your health service?

Actually, increasing the diversity of care coordinators in our team – not just relying on social workers – but growing the depth of talent and skills and looking beyond the professional boundaries.

What do you anticipate this will achieve?

Our hope is that our work will be recognised for what it is and what it does for our patients. I hope we will have many good news stories to tell after we have been operational for 3-4 years. My dream is to have patient care prioritised. How we measure that – well – that remains to be determined. I'll know we have arrived when we incentivise warm handovers over discharge letters that never arrive. I'll know we have arrived when value is placed on humanistic outcomes rather than measured in time and money.

Interprofessional collaborative practice (IPCP)

Experiences from a health practitioner

Health service perspective 2

Title: The collaborative practitioner in paediatric and disability services

Author: Melissa Locke, Paediatric Physiotherapist, Growlife Medical.

Context

Movement Solutions is a private paediatric and disability focussed physiotherapy practice working in the southern suburbs of Brisbane. We support family centred care that is goal driven by the patient and their family in collaboration with their health, education, rehabilitation, and social team. We provide face to face, telephone and audiovisual consultations to patients and their families who live locally, within Queensland and New South Wales and our consultant physiotherapist provides care to people in the Oceania region. We have a career structure that supports early career therapists develop their diagnostic and therapeutic skills via tailored learning and mentorship.

We work in partnership with local therapists and support workers who may not have the experience in treating complex cases or rare genetic disorders. Some of our patients have been cared for by our staff for more than thirty years, providing unique support across the life stages, as they transition from school to work to living independently.

We provide a combination of one on one, group and class services according to the patients' needs and financial circumstances. Many of our patients receive funding support via the National Disability Insurance Scheme (NDIS).

We have a staff of seven (7) Full Time Equivalent (FTE) physiotherapists, two (2) FTE physiotherapy assistants and three (3) FTE support staff. We have chosen to have a solely physiotherapy-based practice, which allows us to work with a variety of practitioners according to the unique needs of each patient.

We liaise closely with the staff of the major tertiary Children's Hospital to ensure seamless care of patients across the tertiary and community setting by liaising with hospital therapists, specialist medical practitioners and complex care nurses who review our patients in specialised clinics.

We work with therapists and teachers in educational settings to ensure our patients educational outcomes are optimised and services are not duplicated or missed. We attend day care centres and early childhood settings to provide support and recommendations to optimise the physical participation and social inclusion of a child who has extra needs.

We have an extensive community network of occupational therapists, speech pathologists, podiatrists, psychologists, prosthetists, orthotists and pedorthists who we work with collaboratively, in consultation with our patients and their families/ support workers.

The General Practitioner (GP) is the hub of community care, and we strive to ensure that they receive all relevant communication about their patient. As much as possible, we include all involved health professionals in our email communications.

What is working well?

Stakeholder meetings via telehealth, which include the patient and their family and support workers, work well when all stakeholders attend, leave their egos or professional hierarchy at the door and actively listen. Funding options under the National Disability and Insurance Agency (NDIA) and Medicare have made allowed these to occur. A focus on function, community access and independence is becoming commonplace, with a socially focussed, not just a medical model becoming a greater consideration. Follow up meetings on a regular basis (six to 12 monthly) need to occur and this is not yet embedded in practice.

Goal setting is commonplace with review of outcomes of treatments, equipment supplied, and advice given reviewed every three to six months with the patient and their family.

Choice of equipment (funded by state, federal or charitable funding mechanisms) occurs with the patient and family/support workers input, other therapists, and equipment suppliers. Once an optimal piece of equipment is decided upon, it is trialled in the home, school or community with the most suitable health professional taking the lead.

The leading health professional takes the responsibility to contact the rest of the team so that the family is not left communicating with individual practitioners.

Community staff often see the patient more frequently and for longer time periods than tertiary setting staff. We strive to notify specialist clinics of pertinent changes that may not be seen in a hospital appointment which often has changing staff, delayed appointments, and brief consultations.

What is not working well?

With over 60% of graduate physiotherapists now working in private practice as their first job, they have not had the experience of working in a medical team within the hospital/ health service setting. While they have learnt about Interprofessional Collaborative Practice (IPCP) at an undergraduate level, they may not experience this in their first job. It is incumbent upon employers to create a framework and provide the time to ensure IPCP is "de rigeur" for best patient outcome. Many private therapists are in a small business and their narrow margins may preclude best practice in communication.

Hand over from tertiary settings works if there is a prior relationship with staff around that patient. However, the lack of financial support or infrastructure incentives from the government for allied health means we cannot access discharge summaries, radiology images or reports. Hospital policies preclude professionals recommending specific practitioners in the community. Families report feeling directionless and relying on word of mouth to find the best fit for their needs. This is costly and time inefficient.

Professional associations attempt to create mentorships for rural and remote therapists. Little funding is available for the allied health sector, to our knowledge. Informal mentorships occur, through the good will of experienced and altruistic practitioners. There are many experienced community practitioners who could mentor rural and remote practitioners. Mentors need to

come from a variety or practice settings.

We believe that the health professional best placed to help the patient navigate their care and achieve best outcomes at that point in time should be the primary practitioner or at least be an equal voice. The GP is often this professional, but the historical hierarchy of the medical and tertiary settings means that the voice of a therapist in the community can be undervalued.

With less than 2% of graduating physiotherapists being first nations people, there is a massive gap in the care of Aboriginal and Torres Strait Islander children with a disability by Aboriginal and/or Torres Strait Islander physiotherapists.

What do you see collaboration in healthcare looking like in the future?

As a health service we see collaboration in future healthcare demonstrating:

- Ongoing/ increased support/ funding for stakeholder meetings with patient and families
- Innovative model of family led advocacy with the best health professional supporting them as a clinical lead
- Increased exposure to health professions for First Nation's secondary students with support and alternative academic pathways close to home
- Innovative multidisciplinary university programmes in rural locations with Telehealth options to allow students to stay in their region whilst learning.

What changes are you planning to make to improve the interprofessional teams in your health service?

- Keep on doing what we are doing
- Educate new staff as they come onboard about our culture and practice
- As able ensure staff have sufficient time to collaborate with other professions
- Continue to attend interdisciplinary events and educational opportunities
- Seek partnerships via clinical research and grants.

What do you anticipate this will achieve?

- Co-ordinated best care for patients and families
- Less circuitous and costly journey for patients and families
- Better patient outcomes.