

Division of Health Sciences

Interprofessional Education A Strategic Plan 2016 – 2019

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Executive Summary

The overarching goal of interprofessional education (IPE) is to prepare all health professional students for deliberately and collaboratively working together to reach a common goal of well-co-ordinated, high quality patient/client-centred care.

All health professional programmes aim to produce graduates who are: good communicators, able to work effectively in health care teams, able to understand their own role and others' roles, provide patient-centred care and resolve differences – all core IPE competencies. Specific interprofessional (IP) skills can often only be acquired in an IP learning environment.

Developing a co-ordinated and collaborative approach to implementing IPE across and beyond the Division of Health Sciences mimics the underpinning philosophy of IPE and practice – to move from a position of fragmentation to a position of Divisional strength, by progressively and seamlessly integrating IPE components into the Health Sciences programmes.

An interprofessional learning curriculum throughout the course of the health professional degree programmes should ideally be iterative, integrated and appropriate to the level of learning. It is useful to consider four levels of progressively sophisticated IPE activity: Pre-exposure, Exposure, Engagement and Immersion.

Within 3-5 years, all students should have the opportunity to undertake, as a minimum, three intentional, formally identified IPE components during the course of their degree: one Exposure level activity (during their foundation years); one Engagement level activity (foundation or early advanced years), followed by at least one Immersion level activity (advanced years).

These activities should be quality assured, have defined interprofessional outcomes, be assessed and contribute to degree achievement/requirements.

Multiple serendipitous opportunities for consolidation and extension of interprofessional learning should complement intentional IPE components as they arise on campus, in classrooms, in clinical workplaces and other learning environments.

To move from the current situation, where (mainly) Pre-exposure and Exposure level activities might be available some of the time for some students, change and co-ordination is needed.

A planned approach to progressive and seamless integration of IPE components within the health professional degree courses needs to include:

- Cross-division governance, with shared goals (in progress)
- Building a sustainable ethos of staff and organisational collaboration through ongoing staff development, cross-Division organisation and champion networks
- Identification, development and optimisation of IPE resources (e.g. instructional material, staff expertise, timetabling, space, clinical workplace capacity)

Within the next 10 years, aspirational goals should include:

Timetabling

High-level timetabling co-ordination across the Division should be considered using a corporate electronic system. Semester/module alignment, alignment of clinical placement time/rotations, and centralised information about physical location of placements and students would have many time saving and student-safety advantages, including the ability to easily bring students together in common learning environments (physical or virtual) for both intentional and serendipitous learning.

Clinical placement capacity

Workplace learning environments are at a premium for all health professional degree programmes. The Division could consider using a corporate electronic system to co-ordinate clinical placements. Capacity (quantity and quality) can be optimised by a) co-ordination and b) interprofessional placements.

Key definitions (refer to appendix two for more information)

IPC – Interprofessional collaboration is 'an active and ongoing partnership often between people from diverse backgrounds with distinctive professional cultures ...who work together to solve problems or provide services'. (Freeth, Hammick, Reeves, Koppel, & Barr, 2005; Ødegard, 2006)

'Collaborative practice-ready workforce' – a specific way of describing health workers who have received effective training in *interprofessional education*. 'Once students understand how to work interprofessionally, they are ready to enter the workplace as a member of the collaborative practice team'. (World Health Organization, 2010a)

'Defining features of IPE' – an interactive learning modality, (Hammick, Freeth, Koppel, Reeves, & H, 2007) where the interprofessional nature of the learning is made explicit, with intended learning outcomes relating to interprofessional competencies. 'Something must be exchanged among and between learners from different professions that changes how they perceive themselves and others'.

IPL – Interprofessional learning – learning arising from interaction involving members or students of two or more professions. It may be a product of *interprofessional education*, or it may occur spontaneously in the workplace or in education settings and therefore be serendipitous (Freeth et al., 2005; Institute of Medicine, 2015)

Multidisciplinary education – sometimes used interchangeably with multiprofessional education (see below) but may also refer to education between branches of the same profession or between academic disciplines.(Barr & Low, 2013)

Multiprofessional education – occasions when professions learn side by side for whatever reason. (Barr & Low, 2013)

Transprofessional education – knowledge across service agencies for integrated service provision (Hulme, Cracknell, & Owens, 2009)

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View the foundations of our IPE webpage at: otago.ac.nz/healthsciences/ipe

This will be the central repository for all things interprofessional educationrelated in the Division of Health Sciences.

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Introduction

"Occasions when two or more professions learn with, from and about each other to improve collaboration and quality of care." (The Centre for the Advancement of IPE, 2002)

Currently each health discipline is largely taught in a class comprising their discipline only and by teachers of their own discipline and yet upon graduation, students are expected to work collaboratively.

The overarching goal of interprofessional education (IPE) is to prepare all health professional students for deliberately and collaboratively working **together** to reach a common goal of well-coordinated, high quality better patient/client-centred care. At the University of Otago, already-established uniprofessional programmes can and do incorporate some explicit IPE components to good effect for a small number of students. Furthering IPE is therefore a deliberate move towards removing silos and barriers, and providing much increased opportunity for IPE and IPL, in order to ultimately foster collaboration in the workforce (Figure 1).

To some extent, the current approach to IPE in the Division of Health Sciences can be described as a 'confetti' approach; i.e. *adhoc* variants of multiprofessional and interprofessional learning and some IPE activities happening throughout the Health Sciences programme, with minimal overarching leadership or co-ordination. Student access to interprofessional learning and activity, whether intentional or serendipitous, is haphazard. Adding to the complexity of the current approach is the fact that the professional programmes are all conducted in an autonomous fashion and although there are many positive qualities to this, it tends to hamper the ability to practise and even promote collaboration.

Developing a co-ordinated and collaborative approach to implementing IPE mimics the underpinning philosophy of IPE and practice – to move from a position of fragmentation to a position of strength. Within the IPE context, this means moving from working in silos to working collaboratively for the benefit of the patient/client; within the Divisional context, this means fostering staff collaboration and placing a level of planning and co-ordination across the existing *adhoc* and unplanned approach to IPE across the various health professional programmes.

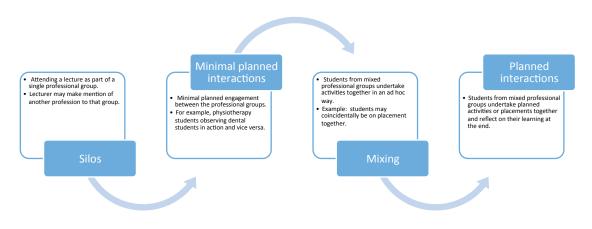


Figure 1 IPE facilitates a shift from passive learning to an active exchange of information, knowledge and understanding that changes how the student perceives themselves and others, and their thoughts around professional roles and interactions.

As endorsed by the Division of Health Sciences Executive, the Division of Health Sciences has an overarching vision to:

"Establish (the University of) Otago as a national leader in IPE across the health professions"

This means:



1. We progressively integrate IPE into our curriculum.

'the way we are'



2. Collaboration is the key.

'as staff, we promote and model positive interprofessional behaviour'



3. Resources are optimised.

'we leverage our existing skillsets, enthusiasm, space and time in an optimal way'

All three of the above goals are intertwined and integrated – each has a relationship with the other.

This document reviews the key findings of our position to date, and then outlines how the Division can achieve its vision in the next five years (refer to appendix three for summary). This document is supported by a work plan, which is attached as appendix four. All outcomes will be measured, through to 2019, with indication of some aspirational 10+ year goals. "It is no longer enough for health workers to be professional. In the current global climate, health workers also need to be interprofessional."

World Health Organization, 2010, p36

View the foundations of our IPE webpage at: otago.ac.nz/healthsciences/ipe

This will be the central repository for all things interprofessional education-related in the Division of Health Sciences.

Current state

At the beginning of 2015, the IPE Project Manager undertook discussions with just over 100 staff across the Division (appendix five) at the three campuses to:

- Communicate about the IPE Project (initially pitched at an undergraduate level, although postgraduate level is also very relevant)
- · Identify current understanding of IPE (and consequently identify staff development needs)
- Identify current IPE activities already underway across the Division (particularly in the second and third year, but also in subsequent years as they came up in discussion)
- · Identify opportunities for potential IPE activities
- · Identify barriers to implementation of future IPE activities.

Those discussions revealed a number of findings, which are summarised below:

A snapshot of our current IPE activities

During the course of discussions across the Division, information was collected on IPE activities already underway (or, being considered as potential) (see appendix six for the full list).

While the discussions to date have predominantly focused on years two and three of the current Health Sciences programmes (particularly on the Otago campus; other years were discussed in Christchurch and Wellington), during the course of discussions IPE activities that were happening in later years were also recorded. Loose criteria were applied with an expectation to only record activities where multiple professions were involved and there was some form of interaction (planned or otherwise) – often IPE examples cited were actually examples of multi-disciplinary activity (side-by-side learning). The activities were then categorised as follows:

- **Pre-Exposure:** opportunistic introduction to other professions (examples: students from different professions attending the same lecture together, or a guest lecturer teaching another profession's students)
- Exposure: interprofessional learning with stated IPE intent, even though the learning may also be opportunistic (examples: Physiotherapy students observing Dental students in action and vice versa; buddying with a Nurse or observing a Play Therapist)
- Engagement: specific interprofessional learning objectives, action, shared learning and assessment (examples: Physiotherapy shared exercise class, some aspects of the medical Rural Immersion Programme [although interactions might be intentional or might be incidental])
- Immersion: working together in practice/workplace setting (examples: Wellington Interprofessional Training initiative ("WITI") programme; Tairāwhiti IPE; Timaru "Interact" programme).

The intent behind the categorisation in this way was to identify the placement of our current IPE activities (that only *some* students are involved in) on an IPE continuum (similar to that developed at the University of British Columbia (Charles et al., 2010). The table below provides a snapshot as at early 2015 of all the IPE activities that were identified during discussions:

Table 1 Current 'self-identified' IPE opportunities in the Division of Health Sciences

Current IPE (44)	Pre-Exposure	13
	Exposure	22
	Engagement	2
	Immersion	7
Potential* IPE (32)		

*Potential IPE opportunities were those where staff reported possible changes that could transform a current uniprofessional learning activity into an IP one, or where they had considered possible opportunities for collaboration.

The 'current state' discussions also helped identify the following:

- 1. Many activities that occur at a pre-exposure and exposure level are all many students currently get, even at their advanced years. These are frequently not intentionally framed or explained by teachers as being IPE or what the purpose of IPE is.
- 2. Many activities that are currently considered pre-exposure or exposure could be shifted to the next level on the IPE continuum if they were reframed with an "IPE lens"; for example structure put in place so that any incidental IPE interaction is planned and reflected upon.
- 3. The current fragmented, incidental approach to IPE within the Division of Health Sciences means that students don't naturally progress through an IPE continuum pathway that would take them through the levels of exposure through to immersion in a seamless or planned way.



Goal one

IPE is progressively and seamlessly integrated into the Health Sciences programme.

Understanding of IPE

Confusion existed amongst staff about what is meant by IPE both from a definition point of view and also its practical implications for both staff and students.

While there were pockets of genuine understanding, championship and practice, there were also examples where staff described scenarios assumed to be IPE which were more aligned with multi-disciplinary education; and there were other staff who knew little about the IPE concept.



Goal two

Collaboration is the key – a staff development programme is needed.

Divisional considerations

Historically, each school within the Division of Health Sciences has worked hard to establish an identity for their own professional group so that ideally, there was no dominance of one (however, Medicine has been traditionally, and by many still is, perceived as the dominant profession, and it is by far the largest School in the Division). Consequently, staff are very proud of their autonomy within their Schools and the fact that decisions can be made without having to consult widely with other Schools/faculties/departments.

At an operational level, this has resulted in inconsistent approaches to setting and scheduling timetables which consequently creates a significant barrier to easily implementing IPE activities. While there are many overlaps of content that can be leveraged to create IPE activities within the Division of Health Sciences' timetable, this approach also means that it is significantly more difficult to find and/or schedule common times within an already-full Divisional timetable.

A perception exists amongst some staff that it can be difficult to collaborate with other staff and/or Schools and in some instances, the trust required for collaboration to work well is minimal. It takes time to develop trust, but only moments to create mistrust, so if IPE is attempted without an understanding of/cognizance of the underpinning values, there is a real risk of doing harm. Given that collaboration is a key focus of IPE, we need to be mindful of fostering more collaborative experiences for staff, so that teaching delivery is cohesive. Ideally, some of the work for the future would go into removing culture barriers (perceived or otherwise) so that staff feel a willingness to collaborate more effectively with their colleagues.

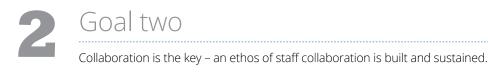
Involvement of other stakeholders

"A critical element of IPE is the availability of partners and settings that would enable opportunities for health professional students to engage in learning opportunities that affect their behavior in clinical situations." (Buring et al 2009).

The scope of the 2015 project has been to focus initially on professions currently within the Division of Health Sciences¹ before expanding out to include other professions. For example, Nurses, Social Workers, Occupational Therapists, Clinical Psychologists, Midwives and other professional groups have been identified as important stakeholders to be involved in meaningful IPE initiatives in time, particularly in the more advanced years. There is a keen desire across the Division to collaborate more fully with other professional groups outside of Health Sciences and/or the University.

While there is some movement towards involving Nursing students in Christchurch (when the Graduate entry Master of Nursing programme is established) and Wellington (in post graduate and other IPE initiatives where it is hoped Massey University nursing students will be involved), this has not yet been a focus of the current IPE project.

The current Tairāwhiti Programme is an example where collaboration with other professions such as Nurses, Dieticians, Occupational Therapists in a practical setting has worked well and it demonstrates that while the Division does have a challenge to collaborate within, it also needs to look outside for other collaborative partnerships in order to create meaningful interprofessional opportunities and engage with others in the clinical environment.



 Bachelor of Dental Surgery + Hons; Bachelor of Dental Technology + Hons; Bachelor of Medical Laboratory Science; Bachelor of Medicine and Bachelor of Surgery; Bachelor of Oral Health; Bachelor of Pharmacy + Hons; Bachelor of Physiotherapy + Hons; Bachelor of Radiation Therapy + Hons; Master of Nursing (graduate training programme); Master of Dietetics Foundation years: Physiotherapy (Y2), Medicine (Y2 & 3), Dentistry (Y2 & 3), Pharmacy (Y2 & 3) Advanced years: Physiotherapy (Y3 & 4), Medicine (Y4, 5, 6), Dentistry (Y4 & 5), Pharmacy (Y4)

Time constraints

It was not uncommon for staff to voice concerns about already having a full teaching, research and administrative workload. Combined with this, some staff were unsure about whether the IPE project was "just another buzz word" or whether there was a genuine desire for this to be a resourced Divisional focus. This perception may reflect the current lack of consistency in the understanding of IPE, its benefits and purpose and also the fact that the project launched in 2015 is in its very early stages, meaning that the resources and structure required to succeed have not yet been fully set up. The frame of reference therefore, is that an IPE approach will create work as opposed to likely reduce work (as it would if it was implemented correctly).

The consequence of staff feeling that they already have a full teaching, research and administrative workload means that future project effort will be required on identifying duplications of effort, timetabling and capacity planning.



Underpinning the ideal state: how IPE competencies meet University and programme objectives

The University of Otago outlines a number of graduate attributes that its students will possess upon graduation. IPE competencies will align seamlessly with these (as outlined in italics below) and as such, Health Sciences students will be well prepared to work collaboratively with others to deliver an integrated model of collaborative clinical care in practice.

 Communication: Ability to communicate information, arguments and analyses effectively, both orally and in writing.

Our Health professionals demonstrate their excellent communication skills by listening to the patient/client's issues and concerns, contributing to a common understanding of decisions relating to care (and documenting these succinctly) and being able to communicate outcomes and actions in a relatable way.

Critical thinking: Ability to analyse issues logically, to challenge conventional assumptions, to consider different options and viewpoints, make informed decisions and act with flexibility, adaptability and creativity.

Our Health professionals understand each other's scopes of practice with regard to the patient/client. They recognise that any overlaps of professional expertise can be leveraged for the benefit of the patient/client, particularly with regard to developing innovative and collaborative solutions.

Cultural understanding: Knowledge and appreciation of biculturalism within the framework of the Treaty of Waitangi; knowledge and appreciation of multiculturalism; and an ability to apply such knowledge in a culturally appropriate manner.

Our Health professionals understand, respect and demonstrate cultural diversity. They have an understanding of how cultural beliefs and practice may influence decision-making processes and outcomes.

Ethics: Knowledge of ethics and ethical standards and an ability to apply these with a sense of responsibility within the workplace and community.

Our Health professionals proactively support and engage the participation of the patient/client and their family in decision-making.

• Environmental literacy: Basic understanding of the principles that govern natural systems, the effects of human activity on these systems, and the cultures and economies that interact with those systems.

Our Health professionals have an understanding of the global health environment and the impact that collaborative practice can have on health outcomes at systems and consumer levels

 Information literacy: Ability to apply specific skills in acquiring, organising, analysing, evaluating and presenting information, in particular recognising the increasing prominence of digital-based activity.

Our health professionals are proficient in the use of technology and base their practice on evidence informed learning.

 Research: Ability to conduct research by recognising when information is needed, and locating, retrieving, evaluating and using it effectively.

Our Health professionals are able to research independently and collaboratively for the benefit of the patient/client.

- Self-motivation: Capacity for self-directed activity and the ability to work independently. Our Health professionals are able to see the benefits of collaboration and direct their learning in such a way that they are able to work collaboratively.
- **Teamwork:** Ability to work effectively as both a team leader and a team member.

Our Health professionals have excellent interpersonal and relationship building skills. This enables them to relate well to patients/clients, families and other teams as well as work effectively with others to foster effective patient/client outcomes.

A table outlining how the IPE competencies can align with the various Schools' (and University) graduate profiles is attached as appendix seven to this document.

Goal one: IPE is progressively and seamlessly integrated into the Health Sciences programme

"A successful IPE learning opportunity should be a planned experience for all learners. It can include didactic instruction with or without a clinical experience, but it must be an intervention to assist the transformation of learners' attitudes, knowledge, skills, or behavior related to interprofessional care. In addition, an ideal intervention must include the opportunity for the students to perform some type of reflection as to their initial and changed perception of their role and value in interprofessional care" (Buring et al 2009).

Interprofessional opportunities will be progressively embedded into the existing health sciences programme so that our students will progress through a planned IPE continuum pathway.

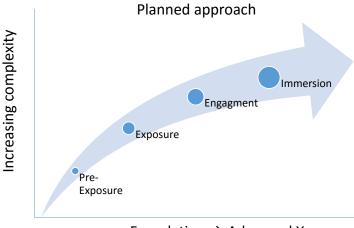
A 'building blocks' approach to IPE will be taken that enables students to build on their experience and knowledge each time they interact with other professions, which means that by the time they enter the workforce, they are skilled and comfortable in engaging with others in a collaborative fashion. Students will experience a mix of learning (experiential learning, shadowing, problem solving etc) while participating in a range of real-world situations with different professional roles and responsibilities involved. This will be achieved by:

- Positioning **pre-exposure, exposure and engagement** activities into the foundation² years where appropriate and practical. This means:
 - All Health Sciences lecturers using examples of other professions within their lecture and tutorial material (which will mean an element of upskilling).
 - Interprofessional and collaborative practice being promoted as a way of being in the workplace.
 - Leveraging and creating planned IPE activities involving several health professions, based on existing common topics.
 - Creating (or in many situations refining) real-world scenarios where students can critically reflect on their involvement in a situation in relation to other health professions.
- Positioning **engagement and immersion** activities into the advanced years³ where appropriate and practical. This means that situations where students are on group/clinical placement will be optimised in such a way so that if students are:
 - On placement with other students, they will have explicit opportunities, and be required to undertake some form of IPE activity together.
 - Shadowing or buddying with another professional student, they will be required to undertake some form of reflective IPE activity with that professional.
 - This will also maximise the current adhoc co-ordination of students from different professions being on the same clinical placement at the same time (linked to goal three).
- Mandating IPE within the Division of Health Sciences in such a way that it will be compulsory and assessed, potentially through a log-book methodology. All students will have opportunities to, and requirements to, participate in a minimum of three intentional IPE components (one at each level) over the duration of their study. (Mandatory requirements have been shown to greatly improve learning outcomes at the University of Toronto). In addition to this, there will also be multiple opportunities to participate in serendipitous Interprofessional learning as it arises in classroom or clinical learning environments.

² Foundation years: Physiotherapy (Y2), Medicine (Y2 & 3), Dentistry (Y2 & 3), Pharmacy (Y2 & 3)

³ Advanced years: Physiotherapy (Y3 & 4), Medicine (Y4, 5, 6), Dentistry (Y4 & 5), Pharmacy (Y4)

The 'Planned approach' diagram below shows that the complexity of IPE activity increases as the student progresses through their professional programme:



Foundation \rightarrow Advanced Years

Figure 2 Planned approach to IPE for health professional students

What is the plan for achieving that progressive and seamless integration?

Given that we want to build a 'building blocks' approach to IPE, all students will participate in a minimum of three intentional IPE components (one at each level) over the duration of their study. Ideally, this approach would transition through complexity. For example, "shadowing a provider is an easy activity for a novice student, *(i.e. exposure level)* while discussing the needs of complex patients requires more advanced knowledge and more time *(i.e. immersion)*" (Deutschalnder & Suter, 2011).

This approach will mean that all students will complete a baseline interprofessional programme as part of their education, and that baseline will be supplemented by frequent opportunistic learning, where students are already aware of and able to take full advantage of learning from students and practitioners from a range of different health professions. Examples of this already exist but are often un-recognised by students as interprofessional learning opportunities (e.g. the Physiotherapy shared exercise class).

In order to measure and track the students' progress through the baseline, the students will be required to undertake formative and summative assessments. These assessments will be collaboratively assessed by staff, against an IPE competency framework (the Canadian Interprofessional Health Collective National Competency Framework) that places an emphasis on:

- · Working with other professions to develop and maintain mutual respect and shared values
- Understanding one's own professional role and scope of practice as well as other professions involved in the care of the patient/client
- · Being able to communicate effectively with the patient/client, their family and other health professionals
- Developing relationship-building and team functioning skills and practice to plan and deliver safe, timely
 and effective patient/client-centred care
- · Developing leadership skills to enhance health outcomes.

In order to build the teamwork component of competency, the activities in the initial foundation years will be predominantly case-based (where the students from different professions will work together to plan for a client with complex care needs) – an approach like this will help the students to progressively appreciate and understand each others' discipline-specific expertise and scope of practice as well as learn a common patient/client-centred approach to solving more complex problems.

What topics could be covered within the planned IPE programme?

Initially, the approach will be two-fold. In 2016, work will be undertaken by the Champion Networks (discussed later in this document) to refine activities already underway. While that is happening, the IPE Project Manager will undertake timetable and clinical placement analysis to further identify duplicated content and resource. This research will form the foundation of the Champion Network's subsequent work plan and will identify core topics that could be leveraged for interprofessionalism.

Initial work undertaken in 2015 identified that topics such as smoking cessation, cultural diversity, communication, ethical practice, the New Zealand Health System and public health could form preliminary modules for interprofessional education. A wide range of content topic areas can be considered for different groups of health professional students undertaking IPE, wherever common learning goals (or intended learning outcomes) can be agreed. These learning outcomes might relate to knowledge, skills and/or attitudes, dovetail with key concepts such as social accountability, quality and safety, and cultural competence, but all will have explicit Interprofessional outcomes that can only be achieved by bringing students from different disciplines together to learn with from and about each other.

The structure required to support the progressive and seamless integration

A Division-wide Champion Network

A champion network will be set up across the three campuses. "For faculty development efforts to be successful, they should model the interprofessional principles we are trying to teach our students" (Silver & Leslie, 2009).

A collaborative champion network like this will model the principles of interprofessionalism, by bringing representatives from different professions together to share in decision-making (deciding upon, forming and assessing IPE activities), and building an interprofessional leadership team in each campus.

Supported by the Divisional IPE Governance Group (referred to in a subsequent section), the structure of the Champion Network is illustrated below (Figure 3):

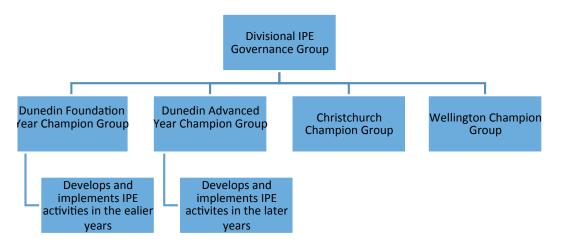


Figure 3 Structure of the proposed champion network

The University's Wellington and Christchurch campuses will each have The University's Wellington and Christchurch campuses will each have one Champion Group, and Dunedin will have two – one for foundation years and one for the advanced years. Each Group will be chaired by a member of the Divisional IPE Governance Group.

The role of each Champion Group will be to:

- Develop IPE activities for their respective campus as per their guiding work plan
- Identify opportunities within their respective professional programme to leverage for interprofessionalism, and raise with the Divisional IPE Governance Group for future consideration
- · Champion IPE within their respective health profession ('it is our way of being')
- Identify staff development needs within their respective School/campus and where possible, develop staff learning opportunities (in conjunction with the rest of the Champion Network and the Divisional IPE Governance Group)
- Progressively work together to develop and implement a methodology to measure and evaluate the IPE programme.

The membership of each group will likely evolve, depending on the topic of the activity at the time, however it is envisaged that each group will have a core membership with representation across each health profession on the campus. The aim of this approach is to foster trust and collegiality across the Division that will evolve over time.

The benefit of a Divisional IPE network is that there will now be four campus-specific groups (that also incorporate satellite campuses nearest to them) actively collaborating together to implement co-ordinated IPE activities. This is an opportunity to leverage the existing interest and passion for IPE that these staff already possess, in a positive way. However, it will be important to balance the work expectations of these groups. As uncovered in the consultation undertaken in early 2015, a lot of IPE activities currently rely on the goodwill and voluntary effort of staff who are working under tight timelines with competing priorities. For that reason, the strategy will take a building-blocks approach to implementing IPE activities.

How would the Champion Network work in practice?

With each group chaired by a member of the Divisional IPE Governance Group, there will be a cohesive approach towards implementation.

Given that we are taking a building-blocks approach towards implementation, it is envisaged that each Champion Group would meet regularly to:

- Review the work-plan for the year's programme of work.
- Consider the interprofessional components to be covered. For example, if the topic was "informed consent", the Champion Group would consider how to weave the consent topic through with an interprofessional lens.
- Consider when might be an appropriate time to place the activity within the existing timetable (using the existing timetable analysis as a basis).
- Identify other key stakeholders to include within the group, depending on the topic. This may also
 include cultivating collaborative partnerships with other outside organisations (e.g. the Otago
 Polytechnic for Nursing or Occupational Therapist students).
- · Identify developmental requirements for the teaching staff involved in the activity.
- Consider opportunities for collaboration across the respective campus.

In order to keep time commitment to a minimum, each Champion Group will be supported by:

- The Division's IPE strategy and yearly work-plan (signed off and mandated as an approach moving forward).
- Existing resources that can be adapted as required (IPE activity structure, case studies, standard information about IPE etc).
- The Division's IPE Project Manager who will undertake any required supplementary research, timetable analysis etc.
- The Division's IPE assessment and competency structure.

What about collaboration amongst the whole Network?

Ideally, the collaboration groups (or at least some members) meet regularly. Meetings could be face-to-face, or online (e.g. in a similar model to the Palliative and End of Life curriculum group, which meets quarterly, virtually). The groups could:

- Share their experiences with implementing activities this may include barriers to implementation and how they addressed them etc.
- Share best practice learnings (e.g. useful articles etc).
- Offer continuous improvement ideas e.g. what is working well about implementation outcomes and what is not.
- Track overall progress against the implementation plan and plan for what other information needs to be escalated/communicated to the Governance Group.

Divisional IPE Governance Group

This group is currently supporting the 2015 IPE project and to some extent, providing operational guidance. In the future, it is envisaged that the Governance Group will act at a strategic level, directing the implementation of co-ordinated activities

As the group would be supported by a Champion Network that is operationally implementing the strategy, the Governance Group could therefore truly govern, as follows:

- · Set the strategic direction of the Division-wide implementation of IPE activities.
- Provide regular reporting to the Health Sciences Pro-Vice-Chancellor and other key stakeholders on IPE strategy and policy direction.
- Maintain oversight of the Division's IPE activities and act as the co-ordinating body for IPE strategy and policy issues.
- Improve performance in IPE activities by moderating activities across the division and actively encouraging a continuous improvement approach to IPE activities.
- Provide leadership in the implementation of Division-wide IPE activities, particularly in staff development.

The DIPEGG would be supported by the Divisional IPE strategy and yearly work-plan.

Chairs for each of the Champion Network groups will be drawn from the Governance Group, so that a level of consistency and strategic leadership is maintained.

The Divisional IPE Governance Group would not meet as frequently as the Champion Network Groups and their meetings would primarily focus on:

- Reports from the Champion Network Chairs: any escalated issues for discussion (short reports would be supplied previously, with each DIPEGG agenda)
- Progress against the strategic plan
- · Overarching progress on staff development
- Any other business.

Goal two: Collaboration is the key

An ethos of staff collaboration is built and sustained

As described previously, one of the key focuses of the Champion Network will be to promote IPE and collaboration across the professions. However, developing an ethos of staff collaboration cannot be maintained simply by having a Champion Network.

For collaboration to be a 'way of being' and to embrace the notion that the 'whole is greater than the sum of its parts', it will take the commitment and involvement of key leaders along with other key stakeholders from the different parts of the Division. Growing a successful IPE program requires "top-down administrative support and leadership" as well as "investment of resources in personnel, time and money" (Brazeau, 2013). This approach to building an ethos of staff collaboration will ensure the interdependence of all stakeholders will result in mutually beneficial solutions. Working together to plan and implement student learning can help support staff collaboration, and vice versa, as an iterative process.

A three-pronged approach will be required to foster an ethos of staff collaboration:

- The Divisional IPE Governance Group will take a leadership role in developing collaboration opportunities.
- The Champion Network will take a leadership role in developing and implementing collaboration opportunities (discussed previously).
- A staff development programme which is based on the premise of "learning together to teach together".

An IPE Staff development programme

Ideally, appropriate teaching staff from across the Division will be brought together to develop their interprofessional skills prior to our formalised IPE programme being implemented. They will have a clear understanding of the global trend towards and also the role of IPE and they will be comfortable modelling collaborative practice. "For interprofessional education to be successful, staff need to be able to engage in and role model collaborative practice; they need to be 'IPE ready'. In clinical settings, clinical providers need to be engaged in interprofessional practice and open to further enhancement" (Oandasan I, Reeves S. Key, 2005).

It is envisaged that the process of bringing appropriate teaching staff together will be an opportunity to model interprofessional teamwork – staff will be able to begin by sharing their department/School's approach to teaching students and then together, they can share and develop strategies for teaching the students. Staff will also expand on their knowledge of other professions, and grow confidence with teaching students from other professions.

As uncovered in the discussions held early 2015, there is no real consistency in understanding of IPE purpose, benefits, meaning and practice across the Division. While there are definite pockets of active staff collaborative practice occurring, this is the exception rather than the norm. The ideal would be that we work towards achieving a baseline level of consistency across the Division.

Staff-Student Mirror: teaching and learning alignment

With the overarching goal of building collaboration across the Division, the staff development programme will mirror the competencies of IPE and also focus on:

Knowledge: building an understanding of IPE – what it is, what it isn't, practical examples, benefits, weaving it within current lecture content.

Team functioning: staff must trust and respect each other if we are to build a collaborative environment. An ethos of professional equality is ideally embedded within this competency and staff must focus on Divisional relationship development rather than individual school gain.

Interprofessional communication: the practice of actively listening to each other's perspectives, respecting diversity of opinions and developing trusting relationships.

Patient/client/family/community-centred care: emphasising the importance of patient/client-centred care and challenging the traditional health professional-centred model of care.

Clarifying roles: developing an understanding of differing scopes of practice, and the value that each health professional discipline can bring to decision-making.

Collaborative leadership: all staff members involved in IPE will collectively work together to develop a climate of shared leadership and collaborative practice.

Interprofessional conflict resolution: recognising that change can be stressful and that skill is required to manage traditional sensitivities across disciplines within and beyond the Division. Staff may well need support to develop strategies to negotiate potential conflict during the transition to collaborative practice.

With the above competencies in mind, the initial staff development programme will focus on key components of IPE and include:

- Learning about local and international developments in IPE
- Developing frameworks for planning IPE
- Learning more about group dynamics and managing team process
- · Developing facilitation skills within the IPE setting
- · Learning more about IPE assessment
- · Approaches to Interprofessionalism and collaborative practice and what this means in a practical setting
- · Supporting students to put theory into practice
- Working with staff from other professions to define and mark assessments.

The beginnings of the staff development programme are being piloted in 2015 where a part-day workshop is delivered to Divisional IPE Governance Group members and associated 'friends'/potential champion network members. The first workshop will focus more on the 'how to do IPE' aspects and be a mix of didactic and practical components. Following on from the workshop, a snapshot review will be undertaken to check fit for purpose, and consider how such a programme of learning might interleave with other existing or proposed health professional education staff development.

Collaborative research

Ideally, as the Division of Health Sciences becomes more 'mature' in the IPE delivery, opportunities to undertake collaborative research on IPE will be maximised.

Research outputs will focus on progress with achieving the vision through knowledge translation to staff and students about IPE and the stages of the implementation process; student outcomes will be reviewed against the goals for achievements at each level of the IPE continuum. In the long term, research will focus on benefits of IPE as a specific educational approach to learning and improving patient and staff satisfaction through the process of collaborative practice.

There are also clear opportunities for Health Sciences staff to collaborate with other people and groups outside of the division (for example with Clinton Goulding from HEDC who already researches in the area of interdisciplinary teaching and learning).

Building social relationships between learners (and teaching staff) from different professional groups should be an explicit aim of an interprofessional education curriculum. (Hean, Craddock, & Hammick, 2012)

Goal three: Resources are optimised

During the course of discussions across the Division, a number of barriers were identified for implementing IPE. The noted barriers align with current literature and include:

- 1. Time staff and students have full timetables, each set by siloed approaches at School level.
- Space/supporting resources* the perception exists that for IPE activities to happen successfully, all of the students need to be in the same place at the same time. Rather, streams could be set up and/or the Champion Network could make better use of e-learning opportunities (where appropriate, as there is considerable value in face-to-face interaction or clinical placements together).
- 3. Money some professions are funded differently to others which raises questions of future funding allocations for IPE activities particularly when IPE is at least initially probably more expensive than siloed teaching.
- 4. Timetabling major lack of alignment currently makes timetabling challenging and very time consuming, not just for IPE but for many other administration tasks.**
- 5. Learning and teaching resources information and instructional sharing have up-front costs but can save time and create consistency in the longer run.
- 6. Evaluation and research ideally evaluation is built into any new component. There is also a need to evaluate innovation at programme level over time. Funding for educational research is a challenging barrier.

The challenge to both the Champion Network and those who are directly involved in supporting IPE activities is to maximise the Division's finite resources (e.g. Bioethics, diversity components etc) in the most efficient way.

Maximising time**

The Project Manager spent some time at the beginning of 2015 documenting the Division's timetable, for years two and three. As the Schools approach the recording of timetables differently (and mostly in a manual fashion), this was a time-consuming process. The consequence of collating a Divisional timetable manually means that time is unnecessarily spent on pulling a Divisional timetable together (as opposed to supporting IPE activities); while individual timetables may change or rapidly become out of date.

Ideally, the Division would mandate the use of corporate systems that could support the electronic entry and modelling of the division-wide timetable, as well as easily identifying the physical location of students (particularly when on placement). This would allow for the IPE Resource to easily and efficiently identify existing areas of content duplication which could be leveraged for interprofessionalism. Eventually, the time and resource invested in using an electronic system in this way would outweigh the time spent:

- Developing duplicate content
- Delivering duplicate content
- · Manually identifying space in the timetable
- · Manually finding physical space
- · Manually sourcing teaching staff.

Maximising space/supporting resource*

Initial work has been undertaken in collaboration with Property Services to give them an overall picture of ideal requirements in terms of use of space. Ideally in the future there will be a gradual shift towards providing more workspaces that allow students to work collaboratively (e.g. student-led clinics as a way of providing practical experience and also serving the community, inpatient IP wards etc).

However, bearing in mind that the Division currently has finite space to work within, the Champion Network will need to think outside the square and consider options different to the traditional face-to-face/lecture-type model. In this respect, the Champion Network could consider options such as:

- E-learning
- Self-directed learning
- Using social media
- Maximising clinical placements.

The University of Michigan is currently exploring the same options. They note that "getting students from all schools for one time and place is difficult if not impossible", citing curriculum and space as the main limitations. They are currently exploring the role of technology, seeking to "augment, but not replace, group interaction" using "online instruction augmented with flexible group meetings and a greater use of simulations." (Ascione, F, 2015).

Supporting resource: IPE Project Manager

Underpinning the achievement of the strategy and yearly work-plan will be an IPE Project Manager whose role will be to administratively support the implementation of IPE activities as follows:

- Undertaking a comprehensive analysis of the Division's timetable and clinical placement and analysing ways for finite resource (Bioethics etc) to be used optimally
- Supporting best practice research evaluation as required by the Champion Network
- Supporting the onboarding of external key stakeholders (e.g. Nursing) across each campus
- Providing administrative support to the DIPEGG
- Continuously improving the Division's IPE process and resources.

Conclusion

As outlined in the introduction, the three goals of progressively integrating IPE into our curriculum, building staff collaboration and optimising resources are intertwined and integrated.

The strength of success lies within the setup and implementation of the Champion Network, and the guidance and support provided by the Divisional IPE Governance Group. This underpinning infrastructure, along with supporting resource (analysis, competencies, tools) is key to ensuring that the Division of Health Sciences establishes (the University of) Otago as a national leader in IPE across the health professions.

"...excellent intra- and interprofessional teamwork among those who work in health care is the only avenue for putting the patient first and making health care safer and more cost effective". (Gordon et al., 2014)

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Appendix 1: Members of the Divisional IPE Governance Group (DIPEGG)

Chair: Associate Professor Sue Pullon – Head of Department (Primary Health Care & General Practice) (University of Otago, Wellington)

Deputy Chair: Dr Margot Skinner – Senior Lecturer (School of Physiotherapy) (University of Otago, Dunedin)

Dr Lynley Anderson - Senior Lecturer (Bioethics Centre) (University of Otago, Dunedin) Associate Professor Jo Baxter - Associate Dean (Māori) (University of Otago, Dunedin) Karen Coleman – Head of Department (Radiation Therapy) (University of Otago, Wellington) Dr Jenny Conder – Senior Lecturer (Centre for Postgraduate Nursing Studies) (University of Otago, Dunedin) Associate Professor George Dias - Anatomy (Otago School of Medical Sciences) (University of Otago, Dunedin Associate Professor Jean Hay-Smith (Rehabilitation Teaching & Research Unit) (University of Otago, Dunedin) Professor Linda Holloway - Deputy Head of Department (Pathology) (University of Otago, Dunedin) Eileen McKinlay – Senior Lecturer (Primary Health Care & General Practice) (University of Otago, Wellington) Dr Louise Mainvil - Human Nutrition (Sciences) (University of Otago, Dunedin) Dr Maggie Meeks - Medical Education Unit (University of Otago, Christchurch) Professor Pauline Norris - Associate Dean (School of Pharmacy) (University of Otago, Dunedin) Professor Alison Rich - Head of Department, Oral Diagnostic and Surgical Sciences (Faculty of Dentistry) (University of Otago, Dunedin) Faumuina Associate Professor Faafetai Sopoaga – Associate Dean (Pacific) (RSL) (University of Otago, Dunedin Maree Steel – Associate Dean (University of Otago, South Canterbury) Professor Barry Taylor - Dean (Dunedin School of Medicine) (University of Otago, Dunedin) Brad Watson - Programme Manager (Pacific) (University of Otago, Dunedin) Christine Wilson – Interprofessional Programme Manager (University of Otago, Wellington)

Appendix 2: IPE – what it is, and why do it?

(summary update paper prepared by Sue Pullon for the FCC, 29 May 2015)

Interprofessional education and collaborative health care

Interprofessional education (IPE) has been widely promulgated among the health professions as an important way to create collaborative practice-ready health practitioners.(World Health Organisation, 2010a) *Interprofessional education* occurs 'when learners of two or more health or social care professions engage in learning with, from, and about each other to improve collaboration and the delivery of care'. (Freeth et al., 2005) IPE is not a new concept; as long ago as the 1960s, calls were being made for health professionals to learn together more effectively in order to provide better care for patients.(World Health Organisation, 1988)

In the last 20 years the need for collaboration in health care has become ever more evident – no one health professional can now provide all the skills and services that constitute modern well-coordinated, high-quality, best patient care – especially for those with complex and/or chronic conditions. Despite good intentions health systems have become increasingly fragmented and inefficient; the WHO describes education for and implementation of collaboration as one of the most important ways to move health systems from fragmentation to positions of strength.(World Health Organisation, 2010a)

Interprofessional collaboration (IPC) is 'an active and ongoing partnership often between people from diverse backgrounds with distinctive professional cultures ...who work together to solve problems or provide services' .(Freeth, Hammick, Reeves, Koppel, & Barr, 2005; Ødegard, 2006) A number of IPC competencies have been well described and include effective interprofessional communication, patient/client family/ community-centred care, role clarification, team functioning, collaborative leadership and interprofessional conflict resolution. (CIHC Canadian Interprofessional Health Collaborative, 2010; Curran et al., 2009)

Although this type of co-operation is often assumed to occur in health care, and tacitly assumed to be essential practice, in reality many gaps and duplications occur both within and between health and social services. (Nelson, Tassone, & Hodges, 2014) Poor collaboration and serious communication errors continue to all too often result in compromised patient safety and low quality of care.(Leonard, Graham, & Bonacum, 2004; Paterson, 2012)

On the other hand, when the key elements of collaboration are successfully implemented in a practice setting, this can appropriately be called *interprofessional collaborative practice (IPCP)*. (Morgan, Pullon, & McKinlay, 2015) When IPCP is working well in a particular setting, it has been shown to achieve higher patient satisfaction, (Proudfoot et al., 2007) improve patient safety, (Timmel et al., 2010; Velji et al., 2008) and improve health outcomes. (Strasser et al., 2008) Increased job satisfaction, (Proudfoot et al., 2007) and increased retention/recruitment of staff also result. (Borrill et al., 2000)

Linking education more closely to practice

Three ground-breaking, wide ranging review international reports on health systems and health professional education were published in 2010 with clear calls for educational change, including IPE. The WHO Framework for Health, a Lancet Commission report, and a Global consensus on Social accountability for medical schools all described major mismatches between current health professional education and current health practice needs.(Frenk et al., 2010; World Health Organisation, 2010a, 2010b) The US Institute of Medicine's 2015 report reiterated similar recommendations.(Institute of Medicine, 2015) Each called for urgent reorientation of health professional education to not only better align with current and future health societal needs but to go further and **lead the way** towards better, more collaborative and sustainable health systems. As Frenk and colleagues state,

a shared vision and a common strategy for postsecondary education in medicine, nursing, and public health that reaches beyond the confines of national borders and the silos of individual professions [is urgently needed].To have a positive effect on health outcomes, the professional education subsystem must design new instructional and institutional strategies.(Frenk et al., 2010)

All these major reports specifically identify interprofessional and transprofessional education as instructional reforms necessary to not only enhance collaborative relationships and effective teamworking, but also to foster analytic decision making, ethical deliberation, leadership and management capability. While learning together enhances future working together,(Thistlethwaite, 2012) it also fosters deeper transformative learning about the nature of health care.

Interprofessional education as educational theory and philosophy

IPE has now developed to the point where it is emerging as a philosophy of learning, drawing on educational, social and psychological underpinnings. The values ascribed to IPE encompass a focus on needs of individuals, families and communities, equal opportunities within and between the professions, respect for individuality, difference and diversity, the sustaining of professional identity and expertise, and promotion of parity between the professions in the learning environment.(Barr & Low, 2011)

Hean, Craddock and Hammick (in AMEE guide 62) highlight the importance of IPE as a social learning construct, consistent with principles of adult learning theory, social capitalism, and communities of practice.

Building social relationships between learners (and teaching staff) from different professional groups should be an explicit aim of an interprofessional education curriculum. (Hean, Craddock, & Hammick, 2012)

The widely accepted definition of IPE derives from these concepts. By definition IPE is an interactive learning modality, (Hammick, Freeth, Koppel, Reeves, & H, 2007) where the interprofessional nature of the learning is made explicit, with intended learning outcomes relating to interprofessional competencies. 'Something must be exchanged among and between learners from different professions that changes how they perceive themselves and others'. In a clinical setting, learners can intentionally come together to share in decision-making about patient care.

Interprofessional learning is however a wider, more diffuse concept, described as learning arising from interaction involving members or students of two or more professions. It may be a product of *interprofessional education*, or it may occur spontaneously in the workplace or in education settings and therefore be serendipitous (Freeth et al., 2005; Institute of Medicine, 2015) However, 'the prepositions 'with, from and about' are fundamental to the learning experience. All three must be present for the 'inter' in interprofessional learning (IPL) to apply, meaning that simply bringing different professional groups and students together to learn in the same setting is not enough'. (Thistlethwaite, 2012)

IPE is both philosophy and method

Notwithstanding the complexities of the overall approach, IPE methods can be incorporated into a range of both simple and more complex learning activities. Staff training is generally necessary. (Barr & Low, 2013) Formats can include small or larger modules incorporated into established health professional programmes, e-learning components run in parallel with other learning, integrated clinical workplace learning, and/or common curriculum and assessment components across all professions.(Thistlethwaite, 2012) Classroom, community and clinical settings can and have all been utilized successfully.

Like much educational endeavor, these activities are more likely to be effective when embedded into an integrated programme of study. (Barr & Low, 2013) Progression from initial IPL/IPE exposure at early stages of health professional programmes through active, more intentional IPE engagement to immersion in the senior years is what leads to mastery of interprofessional collaboration competencies.(Charles, Bainbridge, & Gilbert, 2010) The "Linköping IPE model" (an integrated programme of study culminating in clinical experience in an interprofessional student-run ward now sustained for over 20 years) has shown significant differences in interprofessional collaborative practice (IPCP) ability between doctors from Linköping compared to other Swedish medical schools, with Linköping graduates consistently better at working with people in other health professions. (Wilhelmsson et al., 2009)

Although more empirical evidence is still needed to bridge the so-called gap between education and practice, there is steadily growing evidence that IPE creates positive interaction, that it encourages interprofessional collaboration and that it improves client care.(Barr, Koppel, Reeves, Hammick, & Freeth, 2005; Pollard & Miers, 2008) Given the complexities of definitely demonstrating the effect of any specific educational intervention within a professional degree programme, (Nelson et al., 2014)and the unambiguous desire of workplaces to have practitioners capable of working more effectively together, it is time to move forward at the same time as setting up opportunities for longitudinal empirical studies.

The progression to Mastery

IPE is in part both the journey and the outcome, with mastery of IPE competencies resulting from a broader transformative learning process that also encompasses critical synthesis of information, the pursuit of innovation, quality and safety, respect for culture, difference, and notions of social accountability. (Frenk et al., 2010). In a recent comprehensive review of IPE in the UK, over two thirds of health professional education institutions now provide IPE curricular components, with many moving away from brief 'one off' IPE activities to increasingly undertaking 'staged, cumulative, progressive and assessed learning for all the professions involved'. (Barr, Helme, & D'Avray, 2014)

IPE is fully aligned with and integral to a range of important current practice discourses – the need for practitioners to optimize skills, be culturally competent, be capable of ethical decision making, be able to participate effectively and respectfully in health care teams, and be able to lead health system reform that reduces health inequalities, and benefits individuals, families and communities. The need in the 21st century for health professional education to be more closely aligned with and linked to health practice should be undisputed.(Frenk et al., 2010; Nelson et al., 2014)

Action at Otago

It is now time for the further introduction of a range of IPL and IPE activities into all the health professional curricula at several levels. Exposure and initial engagement are most appropriate (educationally and pragmatically) in the earlier years, (Wilhelmsson et al., 2009)with increasingly complex, more clinically focused immersion experiences best suited to preparing students to be collaborative-ready by the time they start work. Mastery among health professionals is likely to require additional support in the early postgraduate years, and postgraduate initiatives for experienced practitioners and teachers alike.

Glossary of definitions

IPC – Interprofessional collaboration is 'an active and ongoing partnership often between people from diverse backgrounds with distinctive professional cultures ...who work together to solve problems or provide services' .(Freeth, Hammick, Reeves, Koppel, & Barr, 2005; Ødegard, 2006)

IPCP – Interprofessional collaborative practice – when the key elements of collaboration are successfully implemented in a practice setting. (Morgan, Pullon, & McKinlay, 2015)

'Collaborative practice-ready workforce' – a specific way of describing health workers who have received effective training in *interprofessional education*. 'Once students understand how to work interprofessionally, they are ready to enter the workplace as a member of the collaborative practice team'. (World Health Organisation, 2010a)

IPE – Interprofessional education occurs when learners of two or more health or social care professions engage in learning with, from, and about each other to improve collaboration and the delivery of care. (Freeth et al., 2005).

'Defining features of IPE' – an interactive learning modality, (Hammick, Freeth, Koppel, Reeves, & H, 2007) where the interprofessional nature of the learning is made explicit, with intended learning outcomes relating to interprofessional competencies. 'Something must be exchanged among and between learners from different professions that changes how they perceive themselves and others'.

IPL – Interprofessional learning – learning arising from interaction involving members or students of two or more professions. It may be a product of interprofessional education, or it may occur spontaneously in the workplace or in education settings and therefore be serendipitous (Freeth et al., 2005; Institute of Medicine, 2015)

Multidisciplinary education – sometimes used interchangeably with multiprofessional education (see below) but may also refer to education between branches of the same profession or between academic disciplines.(Barr & Low, 2013)

Multiprofessional education – occasions when professions learn side by side for whatever reason.(Barr & Low, 2013)

Transprofessional education – knowledge across service agencies for integrated service provision (Hulme, Cracknell, & Owens, 2009)

IPE pathway - exposure-immersion-mastery (Charles et al., 2010)

Exposure – an introductory stage that takes into account that one has to learn about one's own profession before one can truly begin to learn about other disciplines.

Immersion – learning collaboratively, rather than in parallel, with students from other professions. It is assumed that by this stage students will have a more advanced knowledge of their professions gained through classroom and practice experience. **Outcome:** The goal of this phase is to offer students opportunities for the types of self-reflection needed to 'transform' their current perspectives on themselves, their professions and others.

Mastery – mastering interprofessional concepts in such a way that they are incorporated in one's daily professional practice. It requires advanced level learning experiences of the kind open to graduate students who have had significant practice experience and/or experienced practitioners. **Outcome:** The goal of this stage is to encourage the development of advanced level critical thinking skills, a high degree of self-reflection and a deeper understanding of the contribution of one's own and the other professions within the health and human service delivery systems.

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Appendix 3: <u>The Strategic Plan in a nutshell</u>

Vision: To establish (the University of) Otago as a national leader in interprofessional education across the health professions.

1. We progressively integrate IPE into our curriculum.

The way we are'.

Outcomes

- 1.1 Students will participate in at least one formally assessed and integrated exposure activity during their course of study.
- 1.2 Students will participate in at least one formally assessed and integrated engagement activity during their course of study.
- 1.3 Students will participate in at least one formally assessed and integrated immersion activity during their course of study.
- 1.4 A methodology to measure progress and evaluate the IPE programme will be implemented.

2. Collaboration is the key.

'As staff, we promote and model positive interprofessional behaviour'.

Outcomes

- 2.1 A division-wide Champion Network will be fully implemented and operational.
- 2.2 A rolling IPE work plan will be defined each year by the Champion Network and the Divisional IPE Governance Group.
- 2.3 A continuous staff development programme that focuses on raising staff knowledge, understanding and practice of IPE will be implemented.
- 2.4 Opportunities to undertake collaborative research on IPE will be maximised.

3. Resources are optimised.

We leverage our existing skillsets, enthusiasm, space and time in an optimal way'.

Outcomes

- 3.1 Analysis will be completed and subsequent changes to facilitate IPE made. Analysis will resolve issues regarding duplication of content and effort, timing opportunities and opportunities for systemisation.
- 3.2 Technological tools such as e-learning will be used to support IPE activities.
- 3.3 Space optimisation work will be undertaken in collaboration with Property Services.

Appendix 4: The supporting work plan, 2016-2019

1. We progressively integrate IPE into our curriculum.

The way we are'.

Overall Strategic Outcomes to 2019

- 1.1 Students will participate in at least one formally assessed and integrated exposure activity during their course of study.
- 1.2 Students will participate in at least one formally assessed and integrated engagement activity during their course of study.
- 1.3 Students will participate in at least one formally assessed and integrated immersion activity during their course of study.
- 1.4 A methodology to measure progress and evaluate the IPE programme will be implemented.

Responsibility	2016 outcome (for implementation, 2017)
Dunedin Foundation Year	Exposure Formalise the joint initiative between Physiotherapy and Dentistry observing each other in practice:
	 define learning outcomes apply any assessment criteria
	Engagement Prepare Smoking Cessation module for implementation (this will involve all Pharmacy, Medical, Physiotherapy and Dental students):
	 define content in line with MoH criteria for certification define learning outcomes prepare case studies identify time allocations define assessment criteria and marking
Dunedin Advanced Year	Engagement and Immersion Pacific Health Day: plan and prepare for a fresh relaunch in 2017:
	 define/refine the learning outcomes so that IPE learning is leveraged formalise interactions between the students – they should have specific things they are looking for as they work together (so that they can reflect upon those) – engagement level explore timetable availability to find an opportunity for students to refresh learning about pacific culture, inequalities of health for Pacific Islanders explore timetable availability to find an opportunity for students to reflect/discuss afterwards this is ideally an opportunity for all advanced year students consideration given to whether this could be undertaken at CHCH and Wgtn campuses as well at the immersion level

Responsibility	2016 outcome (for implementation, 2017)
Christchurch Champion Network	Exposure Plan and prepare for a formalised joint Orientation, for delivery in 2017. Consider modelling upon the Wellington orientation approach, but also take into consideration the work undertaken in Dunedin so that orientation aspects (Māori culture etc) are not duplicated.
	Engagement Maximise fourth year medical student placements:
	 Define/refine the learning outcomes so that IPE learning is leveraged Formalise interactions between the students and/or health professionals – the students should have specific things they are looking for as they work together (so that they can reflect upon those) Formalise an assessed critical reflection exercise attached to clinical placement and establish collaborative marking process
	Immersion Identify what opportunities there are to refine and/or expand the INTERact programme in Timaru
Wellington Champion Network	 Exposure leading to engagement Identify if there are any opportunities for Pediatrics (Medical students) and Physiotherapy students to collaborate and prepare for implementation
	 Engagement Assist the Pediatrics Department to implement structure regarding their current buddying and observation activities
	ImmersionIdentify what opportunities there are to refine and/or expand the WITI programme
Interprofessional Education Manager	 Undertake analysis of the overall Health Sciences programme to identify opportunities for further collaboration. Analysis to include (but not limited to)
	 Completion of timetabling beyond year three Identifying and recording duplicate topic and content areas across the Health Sciences programme Identifying and recording current clinical placements Investigating whether there is any opportunity for other professions to tap into the existing "healthcare in the community" visits as part of the ELM modules Undertaking further information gathering on current IPE activities and potential for new activities (this could take the form of a survey)
	Support the Champion Network to achieve the above outcomes by:
	 Providing administrative support Liaising with timetable co-ordinators to identify opportunities for IPE placements Supporting and/or undertaking research where required Identifying a mechanism to track progress through the IPE continuum Identifying a mechanism to record outcomes of assessment Continually scanning for examples of innovative IPE practice around the world

Responsibility	2016 outcome (for implementation, 2017)
	Support the DIPEGG to achieve the above outcomes by:
	 Providing administrative support Monitoring and reporting on progress against plan – provide regular reports to DIPEGG for tabling at their meetings and also six monthly formal reports for the Health Sciences Divisional Executive Preparing an initial methodology to measure progress and evaluate the IPE programme for review (Champion Network to have input into this)
Divisional IPE Governance Group	 Maintain oversight of progress against plan, 3-5 years, 5-10 years Measure progress and evaluate the IPE programme (support building staff and student evaluation into new initiatives) Consider education research opportunities – internal e.g. CALT and external e.g. Ako aotearoa research programmes Review updates on activities underway Consider opportunities for new initiatives Facilitate workshops to expand knowledge about IPE

2. Collaboration is the key.

'As staff, we promote and model positive interprofessional behaviour'.

Overall Strategic Outcomes to 2019

- 2.1 A division-wide Champion Network will be fully implemented and operational.
- 2.2 A rolling IPE work plan will be defined each year by the Champion Network and the Divisional IPE Governance Group.
- 2.3 A continuous staff development programme that focuses on raising staff knowledge, understanding and practice of IPE will be implemented.
- 2.4 Opportunities to undertake collaborative research on IPE will be maximised.

Responsibility	2016
All Champion Network members	 Champion interprofessional education within respective professions (e.g. raising awareness at departmental/School meetings, acting as a point of contact for IPE-related queries) Identify further staff development needs and collaboratively continuously improve the proposed staff development programme
IPE Project Manager	 Support the Champion Network by developing any resources required to promote IPE within the division Identify further staff development needs and highlight to the Champion Network for consideration Refine existing resources, as required by the Champion Network Prepare for, and administratively support the annual work plan review Administratively support the implementation of the staff development programme Continuously improve the Champion Network by identifying and/or resolving issues as required
Divisional IPE Governance Group	 Champion interprofessional education within respective professions (e.g. raising awareness at departmental/School meetings, acting as a point of contact for IPE-related queries) Identify and promote opportunities to undertake collaborative research on IPE

3. Resources are optimised.

We leverage our existing skillsets, enthusiasm, space and time in an optimal way'.

Overall Strategic Outcomes to 2019

- 3.1 Analysis will be completed and subsequent changes to facilitate IPE made. Analysis will resolve issues regarding duplication of content and effort, timing opportunities and opportunities for systemisation.
- 3.2 Technological tools such as e-learning will be used to support IPE activities.
- 3.3 Space optimisation work will be undertaken in collaboration with Property Services.

Responsibility	2016
IPE Project Manager	 Undertake analysis of the overall Health Sciences programme to identify opportunities for systemisation or streamlining of timetable records Identify best practice IPE resources around the world that can be adapted for the University of Otago setting Work with Property Services to identify space opportunities to accommodate IPE initiatives (at all campuses) Identify opportunities to leverage e-learning throughout the IPE programme and raise these with the Champion Network Keep champion groups active with links between GG and networks, including website development and maintenance

Appendix 5: Communication log

Date	Outline	Туре	Notes
25/11/2014	Governance Group meeting	DIPEGG	
25/11/2014	Andrea Howard - IPE and the division	Meeting	
27/11/2014	Brad Watson	Meeting	To discuss challenges with the Pacific Health Day
2/12/2014	Governance discussion – Margot Skinner	Meeting	
4/12/2014	Sue Pullon & Christine Wilson	Meeting	Outline of Tairawhiti challenges, IPE, the project
8/12/2014	Governance discussion - George Dias	Meeting	
8/12/2014	Governance discussion - Louise Mainvil	Meeting	
9/12/2014	Jude Hodge - the medicine timetable	Meeting	
9/12/2014	Governance discussion - Pauline Norris	Meeting	
9/12/2014	Governance discussion - Linda Holloway	/Meeting	
11/12/2014	Claire Swift (Property Services)	Meeting	Potential collaboration opportunity with the work she is doing
11/12/2014	Peter Gallagher	Meeting	Initial discussion on the IPE stocktake work he had done
15/12/2014	Governance discussion - Jo Baxter	Meeting	
15/12/2014	Timetabling discussion - Anatomy - Ping Liu	Meeting	
15/12/2014	Timetabling discussion - Anatomy - Latika Samalia	Meeting	Strong awareness of IPE. Is quizmaster for an interfaculty quiz which needs followup. Suggested a regular coffee morning or discussion group where presentations could be made around IPE initiatives etc
17/12/2014	Governance discussion - Barry Taylor	Meeting	
22/12/2014	IPE meeting with Willow McDonald (DSM)	Meeting	Referenced an "IPE wishlist" that had been discussed at a school retreat
23/12/2014	Timetabling meeting with Daniel McShane to view software	Meeting	System will not meet needs at present time

Date	Outline	Туре	Notes
28/01/2015	Stocktake discussion - Physiotherapy	Stocktake	Attended by Cathy Chapple, Karen Keith, Margot Skinner, Chris Higgs, Gill Johnson
4/2/2015	Ario Smith - website	Meeting	
4/2/2015	DN School of Medicine HOD's meeting	HOD's	Suggested I talk further to Branko and Wayne Gillet. Assoc Prof J Reid (Chair, Deputy Dean DSM), A/Prof J Baxter (Associate Dean Hauora Māori), Mrs S Boereboom, Prof S Dovey (standing in for Assoc Prof Chrys Jaye, HOD General Practice and Rural Health), Prof W Gillett (HOD Women's and Children's Health) , A/Prof D Gwynne-Jones (Head of Section, Orthopaedics), Prof P Glue (HOD Psych Medicine), Prof L Holloway (Deputy HOD Pathology, HOD Pathology is Assoc Prof Sarah Young), Mrs C Lake, Mrs W Macdonald, A/Prof P Priest (HOD of Preventive and Social Medicine at the time of the meeting. Since then this has changed, in the interim it will be Professor Nigel Dickson) , Prof S Robertson (Associate Dean Research), Mr G Taylor, A/Prof M Thompson- Fawcett (HOD Surgical Sciences) , Prof R Walker (HOD Medicine) , Mrs L Williams
9/2/2015	Wellington - Peter Larsen, Surgery	Meeting	
9/2/2015	Wellington - Peter Gallagher	Meeting	
9/2/2015	Wellington - Christine Wilson	Meeting	
9/2/2015	Wellington - Louise Beckingsale	Meeting	
9/2/2015	Wellington - Dawn Elder	Meeting	
9/2/2015	Wellington - Sue - Tairawhiti lessons/ catchup/professional development	Meeting	
9/2/2015	Wellington - Meredith Perry	Meeting	
9/2/2015	Wellington - Ben Gray	Meeting	
9/2/2015	Wellington - Eileen McKinlay	Meeting	
9/2/2015	Wellington - Tony Dowell	Meeting	IPE with a strategic bent at Wellington
9/2/2015	Wellington - Pete Ellis	Meeting	
9/2/2015	Wellington - Karen Coleman - governance discussion	Meeting	
9/2/2015	Wellington - Ben Darlow	Meeting	
16/2/2015	Vernon Ward - communication about the project	Meeting	Referred me to Grant Butt
16/2/2015	Governance discussion - Jenny Conder	Meeting	
16/2/2015	DIPEGG meeting	DIPEGG	

Date	Outline	Туре	Notes
17/2/2015	Dave Baxter, Leigh Hale & Margot Skinner - communication about the project, IPE challenges within Health Sciences, vision	Meeting	
17/2/2015	Stephen Dufful - communication about the project, IPE challenges within Health Sciences, vision	Meeting	
18/2/2015	Alison Rich - Dentistry timetable	Meeting	
18/2/2015	OSMS HOD's meeting - communicating about the project, asking to consult with them	HOD's	
23/2/2015	Grant Butt - OSMS and IPE	Meeting	
24/2/2015	Wayne Gillett & Helen Patterson - collaboration opportunity	Meeting	Attempted to set up initiative with School of Midwifery but it fell over. Requested my assistance to find out why (Helen had worked with Kerry Adams). Helen does teach a session with the same learning exercises as had been planned with Midwifery. Helen is keen to work with building clinical scenarios with Pharmacy students
24/2/2015	Branko Sijnja - about IPE project, RIP, opportunities for collaboration	Meeting	
9/3/2015	Stocktake discussion - Pharmacy	Stocktake	Attended by Rhiannon, Sue, Arlene, Natalie, June, Shyamal, Aynsley, Shakila, Kate, Pauline, Sarah
23/3/2015	Governance interview - Maree Steel	Meeting	Also discussed Timaru initiative
23/3/2015	Meeting with Rene Templeton	Meeting	Timaru
23/3/2015	Meeting with Maggie Meeks	Meeting	Governance interview, and CHCH experiences
23/3/2015	Meeting with MaryLeigh Moore	Meeting	Discussion on the simulation centre CHCH
23/3/2015	Meeting with Philippa Seaton	Meeting	CHCH experiences
24/3/2015	Meeting with Barbra Pullar & Peter Sykes	Meeting	Surgical experiences
24/3/2015	Meeting with Ben Hudson & Les Toop	Meeting	General practice experiences
24/3/2015	Meeting with Gillian Abel	Meeting	
24/3/2015	Meeting with Hilda Mulligan	Meeting	CHCH experiences
24/3/2015	Meeting with Lutz Beckert	Meeting	Medical experiences, CHCH
25/3/2015	Meeting with James Green, Pharmacy	Meeting	
30/3/2015	Hamish Wilson - Healthcare in the community	Meeting	
30/3/2015	Jo Baxter	Meeting	Sue & Margot to follow-up with Jo

Date	Outline	Туре	Notes
1/4/2015	Chrys Jaye - discussion on project and how best to undertake stocktake discussions with GP & Rural Health	Meeting	
1/4/2015	Nigel Dickson - discussion on project and how best to undertake discussions with Preventive & Social medicine	Meeting	Has suggested that I talk to Leanne
14/4/2015	Jim Reid (Deputy Dean, Dunedin School of Medicine)	Meeting	
20/4/2015	Karl Lyons & Murray McDonald	Meeting	Suggested Colleen, Lindy Foster-Page (won't be back until mid July) and potentially Sue Hanlin for fourth year
20/4/2015	Colleen Murray	Meeting	
21/4/2015	Phil Sheard	Meeting	
21/4/2015	Adele Wooley	Meeting	
28/4/2015	Paul Brunton (Dean of Dentistry)	Meeting	
28/4/2015	Amara Boyd (ELM2)	Meeting	
28/4/2015	Aimee Burns Morsen & Chantelle Shatford	Meeting	Two students from the Physio Students Association
28/4/2015	Chris Higgs	Meeting	
29/4/2015	Mitchell & Naomi, Pharmacy students	Meeting	
4/5/2015	Andrea Howard	Meeting	Talked about the collaboration approach and need for staff to be more collaborative
5/5/2015	W&CH team meeting	Group me	eting
5/5/2015	Meeting with Bioethics	Group me	eting Meeting with John and Lynley
5/5/2015	Meeting with Leanne Parkin, Preventive & Social Medicine	Meeting	

Appendix 6: Outcomes from stocktake discussions – IPE Register

Acronyms: DFY (Dunedin Foundation Year Champion Network), DAY (Dunedin Advanced Year Champion Network), WCN (Wellington Champion Network) CCN (Christchurch Champion Network).

Area of responsibility	/ Description	Current/ potential	Assessment
DFY	Exercise class at Unipol that a Physio and a Nurse lead as an interprofessional team working together for the benefit of the patient (Chris Higgs & Aynsley Peterson).		
	 Physio students attend this regularly Medical students attend this on an adhoc basis Nursing students attend (placed at Mornington Health Centre, attend occasionally) Dietician students attend one session (and they present to the Physio students) with their educator. They do not attend the practical aspect, just the presentation Bachelor of oral health students attend A Pharmacy rep (Ainsley Peterson) attends and brings along some Pharmacy students - they speak to the patients about their medicines (they attend one session) 	Current	Engagement
DAY	Pacific Health Day (co-ordinated by Brad Watson, Pacific Island Unit)	Current	Immersion
DAY	Some Physio students observe Dental Specialists. The feature of this exercise is that the students have an understanding of their respective scope because the dental students do the braces and the dentists and the Physio students look at the joint	Current	Exposure
IPE Resource	Medical day at the Town Hall/Forsyth Barr stadium	Current	Immersion
IPE Resource	Cathy Chapple (Physiotherapy) delivers a lecture to the Post Grad GP students	Current	Pre-exposure
IPE Resource	Gill Johnson (Physiotherapy) runs a post-graduate paper that includes chronic pain as one of the themes and involves a number of lecturers from Medicine and other professions.	Current	Pre-exposure
IPE Resource	Karen Keith runs an initiative with Medical students (initiated by the Med School). They come in to the Physio clinic and the Physio students talk to them about the profession. There have been issues with time constraints and the numbers of students available to do this	Current	Exposure
IPE Resource	Students go on clinical placements and often there are other students there. They may interact with each other, however the placement is not intended as an IPE experience	Current	Exposure

Area of responsibility	Description	Current/ potential	Assessment
IPE Resource	Fourth year Physiotherapy students go to a high school for five weeks and work with teachers and learning support people with the clients which is an interprofessional experience	Current	Exposure
WCN	All students at Wellington had a combined induction together on their first day this year. This enabled them to see that they are part of a bigger group	Current	Exposure
DAY	20 5th year students take part in the programme for a full year across six different centres. The students do work with other students (physios etc) however any IPE experience is completely incidental. (Rural Immersion Programme (RIP) Branko Sijnja)	Current	Engagement
DFY	In the healthcare in the community module, the students have a "Your Health, Your Life" day. They work with nutrition and physio students, in pairs. They have members of the public come in for a health assessment (blood pressure, glucose etc) and work with the nutrition students on healthy eating	Current	Immersion
IPE Resource	In the third year, students have a community care week where they go all over New Zealand. Depending on where they go, they will interact with other health professionals.	Current	Exposure
WCN	There are allied professionals and nurses teaching and stressing interprofessionalism, but any IPE learning is an opportunistic outcome (Surgery (UoW) Peter Larsen)	Current	Pre-exposure
WCN	Clinical attachments where the students are exposed to allied professionals. The learning is adhoc, and none of those teaching staff are part of our department (Surgery (UoW) Peter Larsen)	Current	Exposure
WCN	Theatre nurses run the theatres, we have training sessions from theatre nurses right at the start of surgery, how do you wash your hands, how do you behave etc (Surgery (UoW) Peter Larsen)	Current	Pre-exposure
WCN	Pain specialists and nurses teach the students and the students are attached to the nurses to do visits etc (Surgery (UoW) Peter Larsen)	Current	Pre-exposure
WCN	Students do clinical attachments with Paramedics (Surgery (UoW) Peter Larsen)	Current	Exposure
WCN	Students do radiology attachments; spending time with radiographers (who are technicians) (Surgery (UoW) Peter Larsen)	Current	Exposure
WCN	Students do some pathology, they spend time in the path lab on how surgical specimens are processed etc (Surgery (UoW) Peter Larsen)	Current	Exposure
WCN	The Pediatrics department uses nurses as teachers however this is a one-way learning situation, there is no active exchange (Pediatrics, Wellington Dawn Elder)	Current	Pre-exposure
WCN	As part of the fifth year programme, Pediatrics students spend time with a nurse on a ward as a buddy. (Pediatrics, Wellington Dawn Elder)	Current	Exposure
WCN	The students spend time with a play therapist to find out what they do. (Pediatrics, Wellington Dawn Elder)	Current	Exposure
WCN	Students go out and learn what neurotherapists do (Pediatrics, Wellington Dawn Elder)	Current	Exposure

Area of responsibility	Description	Current/ potential	Assessment
WCN	When Pediatrics students go on community placements they might be exposed to social workers, community nurses and perhaps non- governmental organisations (Pediatrics, Wellington Dawn Elder)	Current	Exposure
WCN	Have at least one nurse who does a lecture on chronic illness in childhood. (Pediatrics, Wellington Dawn Elder)	Current	Pre-exposure
IPE Resource & WCN	WITI Project (Wellington)	Current	Immersion
DAY/DFY	As a result of the Māori programme, Māori Physiotherapy students hosted other students and took turns at presenting their own profession and what their course is like to the others (over a lunch break). There was engagement about this and is the beginnings of IPE (albeit an informal, student-driven initiative)	Current	Pre-exposure
IPE Resource	An opportunity to tap into the existing quizzes and invite polytechnic students along. These are facilitated by Latika. Groups are not explicitly interprofessional, however dialogue across the tables does happen	Current	Pre-exposure
IPE Resource /CCN	INTERact (Timaru) - involves Medical (4th year/first year clin) and Physiotherapy students (4th year) (two med students/one physio student) (Maree Steel)	Current	Immersion
CCN	Rene encourages her Physiotherapy students to spend some time with other professional groups - this is now built into the timetable, but it is relatively informal. Includes a home visit with an OT, Speech Language Therapist etc (Rene Templeton, Timaru)	Current	Exposure
CCN	A collaborative project led by the Department of Anesthesia in conjunction with the DHB - there is an operating simulation using the simulation room - there are anesthesia trainees who are doctors, operation theatre nurses, recovery nurses and anesthetic technicians. No surgeons. Is however dominated by the medical perspective. The Anesthetic doctors resource and staff it but we grapple with ensuring that the learning outcomes are pitched at all the disciplines and not just the doctors. We simulate patient cases in theatre having an op done; the patient develops a problem and the team have to manage the patient (you mock up the clinical environne the patient case and the team) so one of the things about simulation that they are being themselves, not role playing. They have to manage the case and they don't know about it beforehand. Then we have a group discussion about what happened, why they did it, what could go better what they'd do differently. Then they'd do another one. (MaryLeigh Moore)	nent, n is	Immersion
IPE Resource	Teamwork and communication sessions are held at the simulation centre but they don't have other students there (they would welcom this, though)		Pre-exposure
CCN	Les Toop and Ben Hudson (Ben is the clinical lead) are part of a collaborative exercise with Pegasus Health - GPs, Community Pharmacists and Practice Nurses meet together to discuss core, topical material which is put together by a group of IPE Facilitators (GP/Physio/Pharmacist etc) - a thousand people participate in this,		

Area of responsibility	Description	Current/ potential	Assessment
IPE Resource /CCN	Les & Ben place fourth year medical students in to General Practices for two months. They are encouraged to work with practice nurses. Trainee Interns spend the majority of a month based in rural practice where they are strongly encouraged and opportunities to work alongside the community Pharmacist (UOC)	Current	Exposure
CCN	Physiotherapy students in CHCH attend a placement in a high school, working with children with disabilities. Other health professions are there at the same time (e.g. speech therapists, occupational therapists etc) (Hilda)	Current	Exposure
CCN	Physiotherapy students work in an early intervention centre for disabled students. Incidental learning takes place here. Often the supervisors do not think it's a good idea to have students from more than one profession, due to space constraints (Hilda)	Current	Exposure
CCN	Physiotherapy students on placements are very much a part of a multi-disciplinary team; working with patients, attending meetings, reports, working with others to identify goals/plans of action, home visits, driving assessments etc. However this is not planned with an intended learning outcome, IPE wise (Hilda)	Current	Exposure
CCN	Some of the sessions during the Clinical Orientation are combined with Physiotherapists (Lutz Becker)	Current	Pre-exposure
CCN	~120 4th year medical students really value the "Shift with a Nurse" - this always receives positive feedback (Lutz)	Current	Exposure
CCN	Students are attached to a doctor and a nurse (one day a week), in community psychology and also in a general practice. (Lutz Becker)	Current	Exposure
CCN	Vascular medicine is taught to medical students by nurse practitioners	Current	Pre-exposure
CCN	Smoking cessation is also taught to the medical students by nurse practitioners	Current	Pre-exposure
CCN	Starting to pilot a longitudinal case for fifth years to get them out in the community working with midwives, establishing relationships with women in the wider sense (while acknowledging that fifth year students are at a different level to midwifery students) (Barbra Pullar)	Current	Exposure
IPE Resource /CCN	The CDHB runs a "prompt" course that's been going for a few years. Staff from ED, Anesthetists, independent midwives, registrars and consultants are involved. They break into groups and run simulation exercises and lectures. It is an intensive day which takes days of preparation. This is run our times a year. It is enormously difficult to get people released from work - Barbra co-ordinates this (Peter Sykes)	Current	NA
WCN	Tairāwhiti Interprofessional Programme	Current	Immersion

Appendix 7: A match of IPE competencies against the University of Otago and Health Sciences Schools' Graduate Profiles

Note: Pharmacy attributes are currently under review.

	IPE Competency	University of Otago Graduate Profile	Medical Graduate Profile
	Learners/practitioners understand their own role and the roles of those in other professions, and use this knowledge appropriately to establish and achieve patient/client/family and community goals. To support interprofessional collaborative practice learners/ practitioners demonstrate role clarification, by: • describing their own role and that of others • recognising and respecting the diversity of other health and social care roles, responsibilities, and		Graduate Profile The capacity to be a critical thinker, capable of weighing, evaluating and integrating new information into his or her understanding of issues. The ability to evaluate his or her own professional functioning and to act to remedy limitations of knowledge, skills and attitudes throughout his or her career. An awareness of his or her professional limitations, and a willingness to seek help when these limitations are met. Information literacy, including the
Role Clarification	 competencies performing their own roles in a culturally respectful way communicating roles, knowledge, skills, and attitudes using appropriate language; accessing others' skills and knowledge appropriately through consultation considering the roles of others in determining their own professional and interprofessional roles integrating competencies/roles seamlessly into models of service delivery. 		ability to locate, evaluate and use information in a range of contexts.

Physiotherapy	Dental	Pharmacy
Graduate Profile	Graduate Profile	Graduate Profile
A sense of social responsibility and an understanding of the contribution of the physiotherapist, other health professionals and health services, society, legal and political influences to the health outcomes of patients. The ability to evaluate their own professional functioning and limitations, to act to remedy any limitations and a willingness to seek help where needed.	IN DEPTH KNOWLEDGE AND SCHOLARSHIP: Possession of a deep, coherent and extensive knowledge and understanding of the sciences underpinning dentistry, the clinical practice of dentistry and the fundamental contribution of research to dental practice INTERDISCIPLINARY PERSPECTIVE: Commitment to intellectual openness and curiosity, and the awareness of the limits of current knowledge and of the links amongst oral and health-care disciplines LIFELONG LEARNING: Commitment to the on-going acquisition of new knowledge and understanding and to the acquisition of new skills in dentistry and clinical practice, and an ability to apply these to an ever- changing environment CRITICAL THINKING: Ability to analyse clinical issues logically, to challenge conventional assumptions, to consider different options and viewpoints, make informed decisions and act with flexibility, adaptability and creativity in dentistry ENVIRONMENTAL LITERACY: Basic understanding of the principles that govern natural systems, the effects of dentistry on these systems, and the cultures and economies that interact with those systems	 1.07.04 Communicates with prescribers on Issues related to prescriptions 1.07.05 Patient-related skills 1.07.05.01 Process for differential diagnosis appropriate for community pharmacy 1.07.05.02 Able to listen to and question patients 1.07.05.03 Can make referrals to other health professionals 1.07.05.04 Can provide treatment with pharmacy- and pharmacist-only medicines and general sale 1.07.05.05 Advises on benefits of drug therapies and risks 1.07.05.06 Advises on monitoring drug treatment outcomes 1.07.05.07 Advises patients on medication use 1.07.05.08 Advises patients on likely side effects 1.07.05.10 Advises patients on appropriate self care measures 1.07.05.11 Medication reviews 1.07.05.12 Ability to determine appropriate drug dosages for patients 3.03.01.01 Roles of healthcare professionals

IPE Competency	University of Otago Graduate Profile	Medical Graduate Profile
Learners/practitioners seek out, integrate and value, as a partner, the input and the engagement of the patient/client/family/community in designing and implementing care/ services.	Ability to analyse issues logically, to challenge conventional assumptions, to consider different options and viewpoints, make informed decisions and act with flexibility, adaptability and creativity.	The capacity to be a critical thinker, capable of weighing, evaluating and integrating new information into his or her understanding of issues. The ability to evaluate his or her own
	 and act with nextbility, adaptability and creativity. Knowledge and appreciation of biculturalism within the framework of the Treaty of Waitangi; knowledge and appreciation of multiculturalism; and an ability to apply such knowledge in a culturally appropriate manner. Knowledge of ethics and ethical standards and an ability to apply these with a sense of responsibility within the workplace and community. Basic understanding of the principles that govern natural systems, the effects of human activity on these systems, and the cultures and economies that interact with those systems. Ability to apply specific skills in acquiring, organising, analysing, evaluating and presenting information, in particular recognising the increasing prominence of digital-based activity. Ability to conduct research by recognising when information is needed, and locating, retrieving, evaluating and using it effectively. Capacity for self-directed activity and the ability to work independently. 	The ability to evaluate his or her own professional functioning and to act to remedy limitations of knowledge, skills and attitudes throughout his or her career. The ability to extrapolate from knowledge and principles to solve new problems. An awareness of his or her professional limitations, and a willingness to seek help when these limitations are met. Information literacy, including the ability to locate, evaluate and use information in a range of contexts. Respect for, and an ability to co- operate with colleagues, competence in teamwork and an understanding of the roles of other health professionals and healthcare teams.

Physiotherapy Graduate Profile	Dental Graduate Profile	Pharmacy Graduate Profile
A commitment to advocate for the health needs of individuals and	IN DEPTH KNOWLEDGE AND SCHOLARSHIP: Possession of a	1.04.02 Data presentation skills 1.04.03 Data interpretation skills
communities.	deep, coherent and extensive	1.04.04 Ability to research drug
	knowledge and understanding of the	monographs
An understanding of the role played	sciences underpinning dentistry, the	1.04.05 Ability to compile evidence-
by individuals and society in the	clinical practice of dentistry and the	based medicine Information
levelopment of disease and the naintenance of wellbeing.	fundamental contribution of research	1.04.06 Interpret drug literature and
C	to dental practice	provide evidence-based advice on the
he ability to evaluate their own	INTERDISCIPLINARY PERSPECTIVE:	use of medicines
professional functioning and	Commitment to intellectual openness and curiosity, and the awareness of	1.04.07 Critical evaluation of statistical
mitations, to act to remedy any	the limits of current knowledge and of	methods
imitations and a willingness to seek	the links amongst oral and health-care	1.06.01 Can communicate effectively
elp where needed	disciplines	with peoples of different cultural
he ability and willingness to facilitate	LIFELONG LEARNING: Commitment	backgrounds
he learning experience of individuals,	to the on-going acquisition of new	1.06.02 Recognises cultural differences
roups and communities, both within	knowledge and understanding and to	2.05.01 Has a reflective attitude to
ind beyond the health sector.	the acquisition of new skills in dentistry	own culture
A sound knowledge of the	and clinical practice, and an ability	2.05.02 Can effectively adapt
bhilosophical, scientific and ethical	to apply these to an ever- changing	communication to different settings
principles underlying the practice of	environment	2.05.03 Shows respect to Individuals
hysiotherapy and an ability to apply	COMMUNICATION: Ability to	2.08.01 Demonstrates respect for
his knowledge as part of competent	communicate information, arguments and analyses effectively in the dentistry	others
olistic physiotherapy practice.	profession and clinical practice,	2.08.02 Has a sense of personal
o demonstrate critical thinking skills,	both orally and in writing and to	responsibility
capable of weighing, evaluating and	communicate with patients in an	2.08.03 Accepts responsibility for own
ntegrating new information into their	empathetic and effective manner	work and performance
turrent knowledge.	CRITICAL THINKING: Ability to analyse	2.08.04 Works accurately
The ability to extrapolate from	clinical issues logically, to challenge	2.08.05 Shares professional strengths
nowledge and principles in order to	conventional assumptions, to consider	with others
solve new problems.	different options and viewpoints,	2.08.06 Behaves with empathy and
	make informed decisions and act with	sensitivity to others' needs and values
Clinical reasoning and problem-	flexibility, adaptability and creativity in dentistry	2.08.07 Communicates effectively with
solving skills relevant to physiotherapy practice.		others
	CULTURAL UNDERSTANDING: Knowledge and appreciation of	
Respect for, and an ability to respond	biculturalism within the framework of	
to the cultural context and aspirations	the Treaty of Waitangi; knowledge and	
of patients, family/whanau, colleagues,	appreciation of multiculturalism; and an	
other health care professionals and communities.	ability to apply such knowledge in a	
	culturally appropriate manner in the	
An understanding of and an ability	profession of dentistry	
to respond appropriately to the	INFORMATION LITERACY: Ability to apply	
obligations of the Treaty of Waitangi.	specific skills in acquiring, organising,	
Knowledge of factors impacting on	analysing, evaluating and presenting information in dentistry, in particular	
nequalities in health outcomes.	recognising the increasing prominence	
Knowledge of factors impacting on the	of information technologies in clinical	
ealth status of Māori, Pacific Island	practice and research	
ind other cultures.	RESEARCH: Ability to conduct research	
	in dentistry by recognising when	
	information is needed, and locating,	
	retrieving, evaluating, using it effectively	
	in clinical practice and reflecting on and	
	evaluating the outcomes	
	TEAMWORK: Ability to work effectively	
	as both a team leader and a team member in clinical practice	

	IPE Competency	University of Otago Graduate Profile	Medical Graduate Profile
DOILIAIT : LEART FUTCUOTITIS	Learners/practitioners understand the principles of team work dynamics and group/team processes to enable effective interprofessional collaboration. To support interprofessional collaboration, learners/practitioners are able to: • understand the process of team development • develop a set of principles for working together that respects the ethical values of members • effectively facilitate discussions and interactions among team members • participate and be respectful of all members' participation in collaborative decision-making • regularly reflect on their functioning with team learners/practitioners and patients/clients/families • establish and maintain effective and healthy working relationships with learners/practitioners, patients/ clients, and families, whether or not a formalised team exists • respect team ethics, including confidentiality, resource allocation, and professionalism.	Knowledge and appreciation of biculturalism within the framework of the Treaty of Waitangi; knowledge and appreciation of multiculturalism; and an ability to apply such knowledge in a culturally appropriate manner. Ability to apply specific skills in acquiring, organising, analysing, evaluating and presenting information, in particular recognising the increasing prominence of digital-based activity. Ability to conduct research by recognising when information is needed, and locating, retrieving, evaluating and using it effectively. Capacity for self-directed activity and the ability to work independently. Ability to work effectively as both a team leader and a team member.	The ability to evaluate his or her own professional functioning and to act to remedy limitations of knowledge, skills and attitudes throughout his or her career. The ability to extrapolate from knowledge and principles to solve new problems. An awareness of his or her professional limitations, and a willingness to seek help when these limitations are met. The ability and willingness to facilitate the learning experience of individuals, groups and communities, both within and beyond the health sector. The ability to be organised and the skills for time management, so that time and resources are used effectively and efficiently. A dedication to appropriate ethical behaviour, based on a well developed awareness of his or her own moral values, and knowledge and application of principles of medical ethics. Respect for, and an ability to co- operate with colleagues, competence in teamwork and an understanding of the roles of other health professionals and healthcare teams. A respect for, and an ability to respond to work with patients to optimise their health and wellbeing. Respect for, and an ability to respond to the cultural context and aspirations of patients, colleagues, other health care workers and communities. A sense of social responsibility and an understanding of the contribution of doctor, health services, society and political influences to the health outcomes of patients. A sense of social responsibility and an understanding of the roles and functions of healthcare institutions in the social and political environment. An appreciation of the global

An appreciation of the global perspective of medicine, and an informed sense of the impact of the international community on New Zealand and New Zealand's contribution to the international community.

Physiotherapy Graduate Profile	Dental Graduate Profile	Pharmacy Graduate Profile
problems and the relevant physical examination findings. To demonstrate critical thinking skills, capable of weighing, evaluating and integrating new information into their current knowledge. The ability to extrapolate from	the workplace and community, with the ability to apply knowledge based on sound scientific principles and meet appropriate workplace standards	
knowledge and principles in order to solve new problems.		
Clinical reasoning and problem-solving skills relevant to physiotherapy practice. Respect for, and an ability to respond to the cultural context and aspirations		
of patients, family/whanau, colleagues, other health care professionals and communities.		
An understanding of and an ability		

An understanding of and an ability to respond appropriately to the obligations of the Treaty of Waitangi.

	IPE Competency	University of Otago Graduate Profile	Medical Graduate Profile
	Learners/ practitioners understand and can apply leadership principles that support a collaborative practice model. This domain supports shared decision-	Ability to apply specific skills in acquiring, organising, analysing, evaluating and presenting information, in particular recognising the increasing prominence of digital-based activity.	Respect for, and an ability to co- operate with colleagues, competence in teamwork and an understanding of the roles of other health professionals and healthcare teams.
	making as well as leadership but it also implies continued individual accountability for one's own actions,	Ability to work effectively as both a team leader and a team member.	A respect for patients and a dedication to work with patients to optimise their health and wellbeing.
ip	responsibilities and roles as explicitly defined within one's professional/ disciplinary scope of practice. To support interprofessional collaborative practice learners/ practitioners collaboratively determine who will		A sense of social responsibility and an understanding of the contribution of doctor, health services, society and political influences to the health outcomes of patients.
Leadersh	provide group leadership in any given situation by supporting:		A sense of social responsibility and an understanding of the roles and functions of healthcare institutions in
Domain: Collaborative Leadership	 work with others to enable effective patient/client outcomes advancement of interdependent working relationships among all participants facilitation of effective team processes facilitation of effective decision making 		the social and political environment.
	establishment of a climate for collaborative practice among all participants		
	 co-creation of a climate for shared leadership and collaborative practice application of collaborative decision- making principles integration of the principles of continuous quality improvement to work processes and outcomes. 		

Physiotherapy Graduate Profile	Dental Graduate Profile	Pharmacy Graduate Profile
A sense of social responsibility and an understanding of the roles and functions of health professionals and healthcare institutions in the social and political environment.	INTERDISCIPLINARY PERSPECTIVE: Commitment to intellectual openness and curiosity, and the awareness of the limits of current knowledge and of the links amongst oral and health-care disciplines	2.05.01 Has a reflective attitude to own culture 2.05.02 Can effectively adapt communication to different settings 2.05.03 Shows respect to Individuals
The ability and willingness to facilitate the learning experience of individuals, groups and communities, both within and beyond the health sector.	COMMUNICATION: Ability to communicate information, arguments and analyses effectively in the dentistry	
A caring and empathetic attitude to others.	profession and clinical practice, both orally and in writing and to communicate with patients in an	2.08.03 Accepts responsibility for own work and performance 2.08.04 Works accurately
A respect for patients and a dedication to work with patients and groups/ individuals to optimise their health and wellbeing.	empathetic and effective manner TEAMWORK: Ability to work effectively as both a team leader and a team member in clinical practice	2.08.05 Shares professional strengthswith others2.08.06 Behaves with empathy andsensitivity to others' needs and values
The ability to develop effective professional relationships with the clients and family/whanau.	WORKPLACE RELATED SKILLS: enterprise, self-confidence and a sense of personal responsibility within	2.08.07 Communicates effectively with others
Oral and written communications skills, including an ability to communicate effectively with individuals, groups and communities, both within and beyond the health sector.	the workplace and community, with the ability to apply knowledge based on sound scientific principles and meet appropriate workplace standards	
Skills in eliciting, documenting and presenting the history of a patient's problems and the relevant physical examination findings.		

IPE Competency	University of Otago Graduate Profile	Medical Graduate Profile
Learners/practitioners from different professions communicate with each other in a collaborative, responsive and responsible manner. To support interprofessional collaborative practice, learners/ practitioners are able to: • establish team work communication principles • actively listen to other team members including patients/clients/ families • communicate to ensure common understanding of care decisions • develop trusting relationships with patients/clients/families and other team members • effectively use information and communication technology to improve interprofessional patient/ client/community-centred care, assisting team members in: • setting shared goals • collaboratively setting shared plans of care; • supporting shared decision-making; • sharing responsibilities for care across team members; and • demonstrating respect for all team members including patients/ clients/families.	Ability to communicate information, arguments and analyses effectively, both orally and in writing. Knowledge and appreciation of biculturalism within the framework of the Treaty of Waitangi; knowledge and appreciation of multiculturalism; and an ability to apply such knowledge in a culturally appropriate manner. Ability to apply specific skills in acquiring, organising, analysing, evaluating and presenting information, in particular recognising the increasing prominence of digital-based activity. Ability to work effectively as both a team leader and a team member.	The capacity to be a critical thinker, capable of weighing, evaluating and integrating new information into his or her understanding of issues. The ability to evaluate his or her own professional functioning and to act to remedy limitations of knowledge, skills and attitudes throughout his or her career. The ability to extrapolate from knowledge and principles to solve new problems. An awareness of his or her professional limitations, and a willingness to seek help when these limitations are met. The ability and willingness to facilitate the learning experience of individuals, groups and communities, both within and beyond the health sector. A dedication to appropriate ethical behaviour, based on a well developed awareness of his or her own moral values, and knowledge and application of principles of medical ethics. Respect for, and an ability to co- operate with colleagues, competence in teamwork and an understanding of the roles of other health professionals and healthcare teams. A respect for patients and a dedication to work with patients to optimise their health and wellbeing. Respect for, and an ability to respond to the cultural context and aspirations of patients, colleagues, other health care workers and communities.

Physiotherapy Graduate Profile	Dental Graduate Profile	Pharmacy Graduate Profile
The ability and willingness to facilitate the learning experience of individuals, groups and communities, both within and beyond the health sector. A sound knowledge of the philosophical, scientific and ethical principles underlying the practice of physiotherapy and an ability to apply this knowledge as part of competent holistic physiotherapy practice. A caring and empathetic attitude to others. A respect for patients and a dedication to work with patients and groups/ individuals to optimise their health and wellbeing. The ability to develop effective professional relationships with the clients and family/whanau. Oral and written communications skills, including an ability to communicate effectively with individuals, groups and communities, both within and beyond the health sector. Skills in eliciting, documenting and presenting the history of a patient's problems and the relevant physical examination findings. To demonstrate appropriate ethical behaviour, based on a well-developed awareness of one's own moral values, and knowledge and application of principles of physiotherapy ethics.	INTERDISCIPLINARY PERSPECTIVE: Commitment to intellectual openness and curiosity, and the awareness of the limits of current knowledge and of the links amongst oral and health-care disciplines COMMUNICATION: Ability to communicate information, arguments and analyses effectively in the dentistry profession and clinical practice, both orally and in writing and to communicate with patients in an empathetic and effective manner ETHICS: Knowledge of ethics and ethical standards and an ability to apply these with a sense of responsibility within clinical dental practice and the community TEAMWORK: Ability to work effectively as both a team leader and a team member in clinical practice	2.05.01 Has a reflective attitude to own culture 2.05.02 Can effectively adapt communication to different settings 2.05.03 Shows respect to Individuals 2.08.01 Demonstrates respect for others 2.08.02 Has a sense of personal responsibility 2.08.03 Accepts responsibility for own work and performance 2.08.04 Works accurately 2.08.05 Shares professional strengths with others 2.08.06 Behaves with empathy and sensitivity to others' needs and values 2.08.07 Communicates effectively with others

	IPE Competency	University of Otago Graduate Profile	Medical Graduate Profile
Interprofessional Conflict Resolution	 Learners/practitioners actively engage self and others, including the client/patient/family, in positively and constructively addressing disagreements as they arise. To support interprofessional collaborative practice, team members consistently address conflict in a constructive manner by: valuing the potential positive nature of conflict recognizing the potential for conflict to occur and taking constructive steps to address it identifying common situations that are likely to lead to disagreements or conflicts, including role ambiguity, power gradients, and differences in goals knowing and understanding strategies to deal with conflict setting guidelines for addressing disagreements effectively working to address and resolve disagreements, including analyzing the causes of conflict and working to reach an acceptable solution establishing a safe environment in which to express diverse opinions developing a level of consensus among those with differing views; allowing all members to feel their viewpoints have been heard no matter what the outcome 	Ability to work effectively as both a team leader and a team member. Ability to communicate information, arguments and analyses effectively, both orally and in writing.	The ability to evaluate his or her own professional functioning and to act to remedy limitations of knowledge, skills and attitudes throughout his or her career. An awareness of his or her professional limitations, and a willingness to seek help when these limitations are met. Respect for, and an ability to co- operate with colleagues, competence in teamwork and an understanding of the roles of other health professionals and healthcare teams. A respect for patients and a dedication to work with patients to optimise their health and wellbeing.

Physiotherapy Graduate Profile	Dental Graduate Profile	Pharmacy Graduate Profile
To demonstrate appropriate ethical behaviour, based on a well-developed awareness of one's own moral values, and knowledge and application of principles of physiotherapy ethics.	INTERDISCIPLINARY PERSPECTIVE: Commitment to intellectual openness and curiosity, and the awareness of the limits of current knowledge and of the links amongst oral and health-care disciplines	2.05.01 Has a reflective attitude to own culture 2.05.02 Can effectively adapt communication to different settings 2.05.03 Shows respect to Individuals
	TEAMWORK: Ability to work effectively as both a team leader and a team member in clinical practice	

Interprofessional Education A Strategic Plan 2016 – 2019

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