Centre for Interprofessional Education
Division of Health Sciences

A Curriculum and Quality Framework for Interprofessional Education at Otago: Strategic Plan 2020-2024

Statement of Policy Recommendations

In conjunction with: 'A Curriculum and Quality Framework for Interprofessional Education at Otago: Strategic Plan 2020-2024: Full Report'

Sponsored by: Divisional Interprofessional Education Governance Group (DIPEGG)

FINAL, 01 November 2019

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Note: Comprehensive references can be found in 'A Curriculum and Quality Framework for Interprofessional Education at Otago: Strategic Plan 2020-2024: Full Report'

Consultation Process

- Draft full report and policy recommendations presented, and considered and accepted in principle, by the Division of Health Sciences Executive March 2019
- Consultation process completed April – October 2019; all feedback and critique considered, incorporated
- Final Full Report and final Statement of Policy recommendations, 01 November 2019

Executive summary

Interprofessional education (IPE) has been widely promulgated among the health professions as an important way to create *collaborative practice-ready* health practitioners (World Health Organization, 2010a). *Interprofessional education* occurs 'when learners of two or more health or social care professions engage in [intentionally] learning with, from, and about each other to improve collaboration and the quality of care and services' (Centre for Collaborative Health Professional Education (CAIPE), 2017).

The case for interprofessional education (IPE) to form a core part of pre-registration health professional degree programmes is strong and increasing. In the Division of Health Sciences at Otago since 2015, we have ratified a vision and strategy for IPE, and selected our current focus (pre-registration programmes); defined our drivers for change; established cross-disciplinary governance and a resourced operational structure; and agreed a conceptual model. A range of discrete learning activities has been developed, refined and evaluated, with each activity meeting recognised standards for IPE. Otago is now well-placed for next steps to meet new registration, and accreditation, expectations - in Australasia and internationally - for pre-registration students.

This Statement of Policy Recommendations was developed through a process of investigation and consultation whose findings are set out in a comprehensive, fully-referenced companion document: "Full Report: A Curriculum and Quality Framework for IPE at Otago [15 February 2019]". As a statement of recommendations, it is intended to be read with frequent reference to the Full report, which established in overview that:

- IPE is increasingly being integrated into health professional curricula around the world
- Otago is making steady progress in implementing IPE in health professional degree programme curricula
- Assuring quality in IPE learning and teaching is essential, and needs to be done without incurring unintended consequences
- Timing is right for giving concerted attention to a quality framework for IPE in our institution.

The Statement makes specific policy recommendations for a high-quality curriculum framework for interprofessional education (IPE) at Otago. It is intended to guide the next phase of IPE development in the Division of Health Sciences over the next five to 10 years.

Overarching recommendations

Recommendation 1: A common IPE language

Rationale: A common language for interprofessional education and practice is imperative if teachers, practitioners and learners across and within health and social disciplines are to fully understand each other at and beyond our institution.

Recommendation 1a: that Otago adopt for common usage a set of terms relating to: interprofessional practice, interprofessional education, IPE learning objectives, IPE

competencies/capabilities and outcomes, levels of IPE learning, and systems of educational equivalence for interprofessional learning.

Recommendation 2: A formal, agreed longitudinal IPE curriculum framework

Rationale: A framework that clearly articulates an agreed, common longitudinal IPE curriculum across degree programmes, albeit with variable components, is the only way to ensure quality across the large number of diverse health professional degree programmes at Otago. A framework is imperative because of the complex matrix of professional and student expectations, regulatory requirements, societal contexts, community expectations, varying lengths of programmes, and the historic programmatic structures.

Recommendation 2a: that Otago adopt for common usage a formal, agreed curriculum framework across the pre-registration health professional degree programmes that has overarching aims, variable components, a set of curricular-level learning outcomes, expectations for students, collectively and individually, and is defined, adaptive, responsive and sequential.

Recommendation 2b: that the IPE curriculum for the Division of Health Sciences **be clearly defined** and agreed from the outset across the health professional degree programmes, also as consistent with the University and Divisional Māori and Pacific strategic plans.

Recommendation 2c: that the IPE curriculum **be adaptive**, allowing for concurrent or later inclusion of, and by, other degree programmes, postgraduate qualifications within the university, or at, or in dialogue with, other tertiary institutions if desired.

Recommendation 2d: that the design and implementation of a longitudinal IPE curriculum at Otago **be responsive**, taking into account the range of partnerships and teaching/learning intersects that support collaborative health and social care professional education, as well as critical outcome threads running through all IPE teaching and learning (e.g. cultural competence, social accountability, collaborative practice, and quality and safety).

Recommendation 3: Staff development and recognition

Rationale: The successful implementation and delivery of an IPE curriculum at many sites and at different learning levels is heavily dependent on developing sufficient IPE facilitation and teaching expertise if expansion and consolidation in the health sciences programmes are to be achieved. The need for educational support and training in IPE and interprofessional collaborative practice extends to clinicians who teach students in their clinical workplaces. A programmatic approach to staff development and workload is also needed across the continuum of IPE activities. Multiple associations are required and the time taken to build and maintain professional relationships and curricular alignment need recognition. Examples include a wide range of clinical workplaces, including: cross-institutional partnerships; simulation-based education centres and staff; rural health

settings and staff; hospices and aged residential cares; associated curricula such as Hauora Māori, cultural competence, Pacific health, ethics, quality and safety.

Recommendation 3a: that a multi-faceted **professional development programme** for staff, including clinicians who teach, be developed and supported as a quality criterion.

Recommendation 3b: that **at programmatic level, staff contribution** to IPE teaching is recognised at departmental, school and divisional level as part of sustainable, core workload allocation/deployment across the continuum of IPE activities and multiple associations.

Recommendation 4: A range of high-quality intentional IPE learning activities

Rationale: Because the range of well-established health professional degree programmes at Otago is diverse, and distributed geographically, the only way to give all students sequential IPE opportunities is to have a wide range of learning activities available at different sites. Some (in earlier years) will provide for all or most students, but many, especially in the later clinically-focused years, will only be suitable for smaller numbers of students at any one time. Each degree programme needs flexibility in the selection of appropriate learning activities.

Recommendation 4a: that the IPE curriculum principally constitutes a variable selection of co-ordinated, sequenced, defined intentional IPE learning activities, consistent with the overarching aims of the IPE curriculum and curricular-level learning outcomes.

Recommendation 4b: that the **timing and sequence of IPE learning activities** is such that they are:

- Introduced early in health professional programmes
- Progressive in intended learning outcomes over the course of study
- Mandatory for all participating students (but note not all students will have opportunity to participate in all learning activities)
- Integrated as part of the overall course of study
- Assessed appropriately with demonstration of the intended IP competencies required.

Recommendation 4c: that IPE learning activities, which can be wide-ranging in their scope and method, should nevertheless all **incorporate key characteristics** (e.g. interprofessional mix of staff and students, clearly stated interprofessional outcomes, summative assessment for the demonstration of IP competencies), with particular criteria for interprofessional learning in clinical workplaces.

Recommendation 5: An IPE Learning Activities Register

Rationale: A register of all IPE Learning Activities, with accompanying guidelines, prerequisites and minimum criteria for IPE activities, is the most efficient way of supporting and ensuring a coordinated IPE system and equivalence process, while also facilitating flexibility. Such an

institutional register also provides a mechanism for quality assurance and continuous improvement at activity and programmatic levels.

Recommendation 5a: that an IPE Learning Activities Register be developed as an early priority.

Recommendation 6: IPE assessment

Rationale:

- **Learning activity assessment** - Agreed interprofessional (IP) **competency domains** are well-developed internationally and provide a clear guide as to what to assess at **learning-activity-level**. Six **IP competency domains** have been developed for Otago (Section 2, Sub-recommendation 2f, p12). The use of several different methods of assessment (and remediation pathways) - well-aligned to discrete learning activities at different stages of learning, including at IP clinical placements - is appropriate. Concurrent profession-specific, or topic-specific, assessment aligned to intended learning outcomes, will often also be appropriate.
- **IPE programmatic assessment -** Methods are needed for programmatic assessment of progressive acquisition of IP competencies by individual students progressing through IPE curricula - but are still under-developed.

Recommendation 6a: that at learning-activity-level, selected **IP competency domains** should form the basis of assessment, using methods that are appropriate at different stages of learning.

Recommendation 6b: that at programmatic level, all **IP competency domains** should be included and assessed somewhere over the course of an IPE curriculum, as a realistic, intermediate goal.

Recommendation 7: IPE attainment

Rationale: Student accomplishment of a formal IPE curriculum, over the course of a health professional degree, needs to be feasible and transparent for both students and staff. For an IPE curriculum to be meaningful to students and staff, and satisfactory for accreditation bodies, regulators and future employers, attainment needs to be clearly demonstrated. At Otago - given the highly distributed nature of our teaching and learning, including clinical workplace learning - IPE learning activities will ultimately need to be cumulatively documented for students over the course of their degree programmes. The first step in this process requires that curriculum components (the learning activities) are able to be mapped to a system of Division-wide credit.

Recommendation 7a: that ultimately, all Otago students attain at least the minimum core IPE curriculum over the course of their health professional pre-registration degree, having adequate opportunity to participate in sequential learning activities to meet an expected level of attainment, and with attainment accommodated suitably within the student's permanent academic record.

Recommendation 8: A system of IPE credit equivalence

Rationale: A student-centred system of 'credit equivalence' across the various health professional degree programmes in the Division is proposed, to articulate the core IPE curriculum and best accommodate and account for longitudinal learning in a wide range of contexts and sites.

The proposed 'points and credit' system for learning activities creates the foundation for students from different degree programmes to accumulate IPE credits through a matrix of elements and requirements, over the course of a health professional degree programme. The proposed credit system is based on: IPE workload hours, complexity of IPE learning, IPE learning objectives, and IPE learning outcomes.

Recommendation 8a: that IPE credits are allocated to IPE learning activities on the basis of workload hours, complexity of learning, and expected learning outcomes; and registered and monitored via the proposed Learning Activities Register.

Recommendation 8b: that, once the Learning Activities Register is in place and undertaking its functions as in Recommendation 8a, credits are accumulated by students through successful completion of successive IPE learning activities over the course of their health professional pre-registration degree, attaining at least a minimum number of IPE credits by the time they graduate.

Recommendation 9: IPE Evaluation

Rationale:

- **Learning activity evaluation:** For IPE learning activities, choice of an available and appropriate outcomes-based instrument, combined from time to time with focus group and/or interview data, is likely to be realistic for evaluation. For complex immersion clinical placement programmes (e.g. in rural locations), input from communities, clinical workplace providers and local stakeholder organisations, are key evaluation components, and a wider range of evaluation is needed.
- **IPE curriculum evaluation**: At the programmatic/IPE curriculum level, the ongoing collation of evaluation information from discrete learning activities will be increasingly important within an overarching evaluation framework, including dialogue and agreement with other programmatic evaluations.

Recommendation 9a: that at learning-activity-level, an appropriate outcomes-based instrument, and at times interview and focus group data, should form the basis of evaluation, with evaluation of complex immersion activities being more extensive.

Recommendation 9b: that at programmatic level, a system of ongoing collation of learning activity evaluation is developed to inform programmatic evaluation.

1 Section 1: A common IPE language at Otago

Rationale: A common language for interprofessional education and practice is imperative if teachers, practitioners and learners across and within health and social disciplines are to fully understand each other at and beyond our institution.

Overarching recommendation 1a: that Otago adopt for common usage a set of terms relating to: interprofessional practice, interprofessional education, IPE learning objectives, IPE competencies/capabilities and outcomes, levels of IPE learning, and systems of educational equivalence for interprofessional learning.

Development of a common language of terms is an important prerequisite for interprofessional education and practice, if teachers, practitioners and learners are to fully understand each other.

This is not to undervalue professional identity, but the reverse: to better understand both difference and common ground (Davies, 2000; Dunston et al., 2009). Differences in perspectives can and should complement each other: no one health professional has all the skills necessary to provide best care for patients/clients with complex problems - often over time - in the context of modern health and social care; yet each brings valuable knowledge and perspective to complex problem-solving.

Key definitions given here are used in this policy statement - for others, and for all references, refer Full report; Chapter 2.

IPC – Interprofessional collaboration - an active and ongoing partnership often between people from diverse backgrounds with distinctive professional cultures, who work together to solve problems or provide services (Barr et al., 2005).

IPCP – Interprofessional collaborative practice - when the key elements of collaboration are successfully implemented in a practice setting (Morgan et al., 2015; World Health Organization, 2010a).

IPE – Interprofessional education - occurs 'when learners of two or more health or social care professions engage in [intentionally] learning with, from, and about each other to improve collaboration and the quality of care and services' (Centre for Collaborative Health Professional Education (CAIPE), 2017).

Defining features of IPE – an interactive learning modality (Hammick et al., 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' (Thistlethwaite, 2012) p.59.

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).

Interprofessional (IP) competency - 'the integrated enactment of knowledge, skills and values/attitudes that define working together across the professions, with other health care workers and with patients/clients, along with families and communities, as appropriate to improve health outcomes in specific care contexts' (Bainbridge et al., 2010). Individuals develop and achieve IP competencies by learning and/or working with others from different health discipline degree programmes' (Forman & Thistlethwaite, 2016).

Interprofessional competency domain - A generally identified cluster of more specific interprofessional competencies that are conceptually linked, and serve as theoretical constructs (ten Cate & Scheele, 2007).

An **IPE learning activity** at pre-registration level is a discrete module/programme/package of learning that intentionally brings students together from two or more (preferably three or more) health professional degree programmes, to learn in interactive ways with, from and about each other, often about a common topic area.

An **IPE curriculum** is an explicit required course of study for health professional students, built from a menu of successive learning activities, which extends longitudinally over the years of a health professional **degree programme**. It is common across different degree programmes within one or more institutions. It recognises different levels of learning at different stages of training, and is embedded as core content within degree programmes.

2 Section 2: IPE curricular framework at Otago

Rationale: A framework that clearly articulates an agreed, common longitudinal IPE curriculum across degree programmes, albeit with variable components, is the only way to ensure quality across the large number of diverse health professional degree programmes at Otago. A framework is imperative because of the complex matrix of professional and student expectations, regulatory requirements, societal contexts, community expectations, varying lengths of programmes, and the historic programmatic structures.

Overarching recommendation 2a: that Otago adopt for common usage a formal, agreed curriculum framework across the pre-registration health professional degree programmes that has overarching aims, variable components, a set of curricular-level learning outcomes, expectations for students, collectively and individually, and is defined, adaptive, responsive and sequential.

Overarching recommendation 2b: that the IPE curriculum for the Division of Health Sciences **be clearly defined** and agreed from the outset across the health professional degree programmes, also as consistent with the University and Divisional Māori and Pacific strategic plans.

Overarching recommendation 2c: that the IPE curriculum **be adaptive**, allowing for concurrent or later inclusion of, and by, other degree programmes, postgraduate qualifications within the university, or at, or in dialogue with, other tertiary institutions if desired.

Overarching recommendation 2d: that the design and implementation of a longitudinal IPE curriculum at Otago **be responsive**, taking into account the range of partnerships and teaching/learning intersects that support collaborative health and social care professional education, as well as critical outcome threads running through all IPE teaching and learning (e.g. cultural competence, social accountability, collaborative practice, and quality and safety).

For IPE learning activities to be of best value to pre-registration students in achieving IP competencies, these need to form together an integrated, robust pathway or programme of learning that steadily progresses developmentally over the course of their degree programme (Barr, Helme, & D'Avray, 2014). Even with the best of high-level mission statements and intentions, 'interprofessional education does not emerge naturally' (Cahn, 2014) p.128, but requires a formal institutional curricular model that is a permanent part of profession-specific degree programme curricula (S. King, Hall, McFarlane, & al., 2017). At Otago, we have established the principle of learning progression with three major levels of learning:

- Exposure – an IPE learning activity that meets the minimum requirements and is case-based or problem-based, but does not need to involve patients/clients either simulated or actual
- Engagement - an IPE learning activity that meets the minimum requirements and involves patients/clients either simulated or actual, but not in a clinical workplace where care is undertaken
- Immersion - an IPE learning activity that meets the minimum requirements and is based in a clinical workplace where students participate in usual care; the term 'complex immersion activity' has been used to denote an extended clinically-based rotation/block module.

Each IPE level has a place on the continuum of learning, with each being a necessary part of a longitudinal curriculum (Harden & Stamper, 1999) - from initial exposure in the early years of a degree programme, through to engagement-level learning activities, with immersion-level learning occurring in clinical workplaces.

The key strengths of the opportunities now available include:

- The wide range of different types of learning activities, in different locations, and in a range of community and hospital-based settings
- The very significant increase in the numbers of students across nearly all disciplines engaging in IPE learning activities
- The strong emphasis on evaluation and research that has strengthened the activities and knowledge, and awareness about IPE, across and beyond the entire Division of Health Sciences.

Challenges for the development and coordination of learning activities remain. The most significant problems are:

- The still extremely limited opportunity for IPE learning activities in clinical workplaces
- The need to strengthen and increase simulation-based IPE learning opportunities
- Workload allocation models for academic staff that do not yet optimally support IPE teaching and research
- The need for more professional development in the area of IPE facilitation and teaching for faculty and clinical staff
- The timetabling and scheduling difficulties resulting from persistent curricular misalignment, across programmes and also across campuses
- The ongoing need for adequate IPE administrative support across all campuses and sites.

Additional specific sub-recommendations: IPE curricular framework

Sub-recommendation 2e: Components of IPE curriculum

An Otago IPE curriculum will describe: overarching aims, a set of curricular-level learning outcomes, a sequence of selected learning activities, and expectations for students, collectively and individually.

The overarching intended learning outcomes for the IPE curriculum are:

- To show evidence of ability to work effectively and safely within an interprofessional healthcare team, to provide optimal person-centred care
- To be able to undertake interprofessional collaborative practice
- To place interprofessional practice competencies/capabilities in multiple contexts – with specific reference to New Zealand society and obligations under the Treaty of Waitangi, cultural competence, social accountability, sustainable and equitable health and social care systems, quality and safety, and person-centred practice.

Sub-recommendation 2f: IPE core competency domains

Sets of specific interprofessional competencies, arranged into core competency domains, will be the essential foundation of the overarching longitudinal IPE curriculum. The six IPE core competency domains at Otago will comprise:

- Interprofessional communication
- Role clarification and appreciation
- Reflective practice, incorporating interprofessional principles, values, ethics
- Teamwork and team functioning, including conflict negotiation and resolution
- Collaborative leadership and followership
- Interprofessional coordination and shared decision-making.

Within each domain, the specific competencies can be considered as learning objectives (what a programme hopes students will achieve), expressed as specific intended learning outcomes (ILOs: statements of what the individual is expected to know, understand, and is able to do, on completion of a learning process).

3 Section 3: Staff development and recognition

Rationale: The successful implementation and delivery of an IPE curriculum at many sites and at different learning levels is heavily dependent on developing sufficient IPE facilitation and teaching expertise if expansion and consolidation in the health sciences programmes are to be achieved. The need for educational support and training in IPE and interprofessional collaborative practice extends to clinicians who teach students in their clinical workplaces. A programmatic approach to staff development and workload is also needed across the continuum of IPE activities. Multiple associations are required and the time taken to build and maintain professional relationships and curricular alignment need recognition. Examples include a wide range of clinical workplaces, including: cross-institutional partnerships; simulation-based education centres and staff; rural health settings and staff; hospices and aged residential cares; associated curricula such as Hauora Māori, cultural competence, Pacific health, ethics, quality and safety.

Overarching recommendation 3a: that a multi-faceted **professional development programme** for staff, including clinicians who teach, be developed and supported as a quality criterion.

Overarching recommendation 3b: that **at programmatic level, staff contribution** to IPE teaching is recognised at departmental, school and divisional level as part of sustainable, core workload allocation/deployment across the continuum of IPE activities and multiple associations.

Developing sufficient IPE facilitation and teaching expertise is essential if expansion and consolidation are to continue. The development of existing learning activities (modules) have shown unequivocally the need for, and the benefits from, enculturating and upskilling academic and clinical staff. Clinicians who teach students in their clinical workplaces also require educational support and training in IPE and IPCP, if learning activities in these settings are to be successfully established and sustained.

The IPE Centre is developing IPE staff development tools (e.g. online Clinical Educators Programme module), and hosts IPE staff development events from time to time across campuses. However, sustainable and effective solutions to the issues of IPE faculty development and IPE workload allocation/deployment of trained faculty, need to be found. As is the case with other elements of current curricular and system misalignment, these solutions need to proceed from decisions at institutional and governance levels, and require high-level Divisional/School/Faculty support, rather than at IPE learning activity level.

Multiple associations are required and the time taken to build and maintain professional relationships and curricular alignment needs due recognition. Simulation-based education (SBE) is often closely related to interprofessional education, with IPE effectively utilising simulation techniques, and SBE intentionally incorporating interprofessional learning. Rural settings are important workplace learning sites; IPE is the basis of the teaching and learning model proposed in future for rural health as the most efficient and sustainable model of health professional education in rural communities, as are clinical workplaces per se. Ethics, social accountability, cultural competence and quality and safety frameworks are integral to the IPE model, as these are highly consistent with, and build on, interprofessional principles, processes and values.

4 Section 4: High-quality intentional IPE learning activities

Rationale: Because the range of well-established health professional degree programmes at Otago is diverse, and distributed geographically, the only way to give all students sequential IPE opportunities is to have a wide range of learning activities available at different sites. Some (in earlier years) will provide for all or most students, but many, especially in the later clinically-focused years, will only be suitable for smaller numbers of students at any one time. Each degree programme needs flexibility in the selection of appropriate learning activities.

Overarching recommendation 4a: that the IPE curriculum principally constitutes a variable selection of co-ordinated, sequenced, defined intentional IPE learning activities, consistent with the overarching aims of the IPE curriculum and curricular-level learning outcomes.

Overarching recommendation 4b: that the **timing and sequence of IPE learning activities** is such that they are:

- Introduced early in health professional programmes
- Progressive in intended learning outcomes over the course of study
- Mandatory for all participating students (but note not all students will have opportunity to participate in all learning activities)
- Integrated as part of the overall course of study
- Assessed appropriately with demonstration of the intended IP competencies required.

Overarching recommendation 4c: that IPE learning activities, which can be wide-ranging in their scope and method, should nevertheless all **incorporate key characteristics** (e.g. interprofessional mix of staff and students, clearly stated interprofessional outcomes, summative assessment for the demonstration of IP competencies), with particular criteria for interprofessional learning in clinical workplaces.

Interprofessional learning activities (in pre-registration programmes) have developed progressively at Otago since 2011. The result is an impressive menu of intentional IPE learning opportunities, all of which meet prerequisites that emerge as optimal for IPE Learning Activities, as noted below.

Pre-registration health professional students in the Division of Health Sciences are located in many places across New Zealand for all or part of their professional degree. The challenge of providing IPE learning activities in multiple locations has been considerable. Yet, this has also been a strength, as local champions have been able to utilise local opportunities to develop innovative learning. The IPE Centre has been able to establish a well-coordinated approach, with much sharing of expertise and resources.

Although there are potentially many opportunities for IPE in clinical workplaces, developing effective, sustainable and safe IPE learning activities takes time, skill and resource. Not uncommonly, students from different degree programmes are placed in the same ward or community clinic for varying lengths of time to gain clinical experience. However, bringing these students together to engage in a defined IPE learning activity occurs as yet unusually. There are a small number of notable

exceptions (the INTERact learning activities for small numbers based at Timaru, Nelson, Hawkes Bay, Christchurch; IPE Cancer Care in Palmerston North, the Tairāwhiti IPE programme).

Serendipitous IPL (e.g. a student working on a clinical team with other health professionals) is likely to also occur, and every opportunity should be taken to foster this, especially in clinical settings, and within health professional teams. Antecedent or accompanying formal IPE learning activities give students the necessary knowledge and skills to realise the potential of serendipitous IPL.

Additional specific sub-recommendations: High-quality IPE learning activities

Sub-recommendation 4d: Prerequisites for IPE Learning activities

An IPE activity would be required to satisfy the following prerequisites:

- Involve students from two or more professions (preferably three or more)
- Involve IPE-trained staff, from two or more professions wherever possible
- Include at least one explicit IP learning outcome – preferably more than one
- Involve interactive learning
- Assess at least one IP competency domain.

(***Also see Section 3*** re guidelines and minimum criteria for IPE activities in an integrated curriculum.)

Sub-recommendation 4e: Characteristics of interprofessional learning activities

1. Include students from at least two, and preferably three, health professions, who participate as 'near-equals' in the activity (for example, this could include senior pre-registration students and junior post-registration students)
2. Involve teachers from different professions who are actively involved in development, delivery and assessment
3. Include time for reflection and debriefing
4. Integrate fully into the degree course by e.g. occurring within normal student workload expectation and within usual timetable/usual hours of work
5. Be required for all participating students (Note 1 - not all students will be able to participate in all activities. Note 2 - if an elective situation, once chosen, students would be fully committed and complete the course).
6. Have clearly stated interprofessional learning outcomes which are explicit and communicated to students from the outset
7. Concentrate on interactive, not didactic, learning
8. Include expectation of reflection and debriefing
9. Link closely to practice and be as authentic as possible (e.g. case-based learning, high-quality simulation, IP clinical placements)
10. Incorporate summative assessment in the same way for all students, including for the demonstration of IP competencies
11. Integrate fully into the degree course by e.g. explicitly linking with relevant degree programme course objectives, dovetailing with relevant degree programme curriculum topics and content, and incorporating summative assessment.

Specific criteria for IPE learning outcomes for clinical placements are detailed in the Full Report; Chapter 4; Conclusion 12.

5 Section 5: IPE Learning Activities Register

Rationale: A register of all IPE Learning Activities, with accompanying guidelines, prerequisites and minimum criteria for IPE activities, is the most efficient way of supporting and ensuring a coordinated IPE system and equivalence process, while also facilitating flexibility. Such an institutional register also provides a mechanism for quality assurance and continuous improvement at activity and programmatic levels.

Overarching recommendation 5a: that an IPE Learning Activities Register be developed as an early priority.

Globally, educational institutions and, less commonly, health service providers, have been developing a variety of mechanisms to articulate and set standards for IPE within and across institutions.

An online institutional register and repository of all IPE activities is a key first step in developing a coordinated system and equivalence process. An accessible register and application process will allow a wide variety of learning activities to be considered, compared, mapped and monitored within a sound IPE curriculum framework.

Additional sub-recommendation: IPE Learning Activity Register

Sub-recommendation 5b: IPE Learning Activity Register functions

The register will serve and support:

- Development and design of IPE activities that meet all guidelines and minimum criteria
- Integration of IPE activities in a health sciences curriculum of progressive interprofessional learning (Section 2) and a system of IPE credit equivalence (see Section 6)
- Monitoring, quality assurance and continuous improvement of ongoing IPE at activity and programmatic levels
- Easy access to IPE information for all Otago students and staff, as well as external partners and others engaged or interested in our programmes.

6 Section 6: IPE assessment

Rationale:

- **Learning activity assessment** - Agreed interprofessional (IP) **competency domains** are well-developed internationally and provide a clear guide as to what to assess at **learning-activity-level**. Six **IP competency domains** have been developed for Otago (Section 2, Sub-recommendation 2f, p12). The use of several different methods of assessment (and remediation pathways) - well-aligned to discrete learning activities at different stages of learning, including at IP clinical placements - is appropriate. Concurrent profession-specific, or topic-specific, assessment aligned to intended learning outcomes, will often also be appropriate.
- **IPE programmatic assessment -** Methods are needed for programmatic assessment of progressive acquisition of IP competencies by individual students progressing through IPE curricula - but are still under-developed.

Overarching recommendation 6a: that at learning-activity-level, selected **IP competency domains** should form the basis of assessment, using methods that are appropriate at different stages of learning.

Overarching recommendation 6b: that at programmatic level, all **IP competency domains** should be included and assessed somewhere over the course of an IPE curriculum, as a realistic, intermediate goal.

Multiple reasons for assessment and evaluation in health professional degree programmes exist and are well known (Biggs & Tang, 2007; Curran, Sharpe, & Forristall, 2007). Assessment can act as a powerful guide to student learning, and inform progression decisions over the course of a degree programme.

Meaningful assessment of interprofessional attributes requires close attention to the intended learning outcomes for interprofessional education. Several frameworks defining agreed core competencies for interprofessional practice (the overarching intent for all interprofessional education) are well-known. Four key frameworks from the UK (CUIPLU Combined Universities Interprofessional Learning Unit UK, 2010), Canada (CIHC Canadian Interprofessional Health Collaborative, 2010), the United States (IPEC Interprofessional Education Collaborative, 2016) and Curtin University, Australia (Brewer & Jones, 2013), along with our New Zealand-specific Otago conceptual model (see ***full Report; Figure 1***) have informed the development of our six key IP competency domains as the basis for IPE assessment (***see Section 4, and the Full Report, Chapter 5***).

Various aspects of interprofessional education have been assessed utilising learning activities that include team-based projects, group presentations, reflective writing and/or portfolio compilation, and informal observation of simulation and observation of practice. In reality, assessment of IP competencies requires multiple methods of assessment. Tools developed for assessment of interprofessional practice in work settings have not proved suitable for the assessment of IP competencies for students.

Attempts have been therefore made to develop observational tools suitable for use with students when assessing their work in teams or groups. Few objective validated tools exist (Reeves, Boet et al 2015). The small number of observational tools available are still in various stages of development; but the following principles are generally agreed:

- Assessment of teamwork should involve direct observation of students performing or working in teams (including while doing the work of learning)
- Assessment of interprofessional skills is wider than observation of teamwork per se
- When learners are involved from more than one professional programme, the learning outcomes (whether interprofessional learning outcomes or topic-related learning outcomes) should be the same for all.

More details about recommended tools are provided in the Full Report; Chapter 5; Conclusion 14

The ability to accurately and fairly assess students summatively as a group or team (rather than as individuals within a team) is as yet challenging; there is an acknowledged paucity of validated tools suitable for use at pre-registration level. Experience at Otago has surfaced issues that can occur in IPE group assessment, and therefore require thoughtful assessment design. For example:

- An IPE activity may include the whole year cohort of some health professional programmes (who may typically be graded), and only part of the year cohort of other programmes (who may therefore typically not be graded)
- An IPE activity may include students from health professional programmes routinely assessed by a grade, and others routinely assessed by pass/fail
- Some students – individuals or health professional groupings – may participate more diligently – actually or perceptually - in group work than others.

Additional sub-recommendations: IPE Assessment

Sub-recommendation 6c: Assessment of IP competency domains

12. Agreed IP core competency domains provide a clear guide as to what to assess, notwithstanding the need to interpret within local contexts. Not all competency domains can (or need) be assessed in every learning activity, but are cumulatively assessed over the course of an IPE curriculum (programmatic assessment).
13. Observations of team behaviour are optimally included if possible, even if to make a judgement about the perceived team skills of individuals, rather than of the team as a whole. Profession-specific, topic-specific and interprofessional competencies are best assessed together if possible, as seamless integration of competencies best represents good health care practice.
14. The use of several different methods of assessment, well-aligned to discrete learning activities at different stages of learning, including at IP clinical placements, is appropriate.
15. Robust and equitable pathways to remediation in IPE activities across the curriculum need to be provided.
16. Methods for programmatic assessment of progressive acquisition of IP competencies in individual students progressing through IPE curricula are needed but are still under-developed.

17. For Otago, ensuring selected competency domains are assessed at learning-activity level, and are all included somewhere over the course of an IPE curriculum, is a realistic, intermediate goal.

7 Section 7: IPE attainment

Rationale: Student accomplishment of a formal IPE curriculum, over the course of a health professional degree, needs to be feasible and transparent for both students and staff. For an IPE curriculum to be meaningful to students and staff, and satisfactory for accreditation bodies, regulators and future employers, attainment needs to be clearly demonstrated. At Otago - given the highly distributed nature of our teaching and learning, including clinical workplace learning - IPE learning activities will ultimately need to be cumulatively documented for students over the course of their degree programmes. The first step in this process requires that curriculum components (the learning activities) are able to be mapped to a system of Division-wide credit.

Overarching recommendation 7a: that ultimately, all Otago students attain at least the minimum core IPE curriculum over the course of their health professional pre-registration degree, having adequate opportunity to participate in sequential learning activities to meet an expected level of attainment, and with attainment accommodated suitably within the student's permanent academic record.

Globally, educational institutions and, less commonly, health service providers, have developed a variety of mechanisms to articulate and set standards for IPE within and across institutions.

To ensure safe, effective IP learning with an emphasis on quality, educational institutions have sought ways to develop an IPE pathway or curriculum (or curricula) of learning, allowing for incorporation of a variety, or selection, of learning activities that nevertheless, over the course of a degree programme, successively build opportunity for IP competency achievement, within a clear framework for their faculty or institution.

Many have now begun developing systems of 'accrediting' discrete learning activities so they meet IP educational standards and can form part of integrated IPE curricula that students undertake over the course of their degree programmes. Some of these also apply to those programmes developed 'proactively', and are particularly useful where a variety of IPE learning opportunities can/have to be offered in diverse settings. Some systems also actively lend themselves to fostering student choice.

A summary of a system of Division-wide credit is provided next in Section 8, with more detail in the Full Report, Chapter 6

Sub-recommendation 7b: Requirements to complete the IPE curriculum

To complete the IPE curriculum, a student would need, as a minimum, to:

- Have completed at least 2 learning activities of varying complexity (as at 2019); and at least 3 when learning activities are fully developed (e.g. 2025)
- Attain a set number of credits by an approximate midpoint in their degree – the midpoint to be determined by the relevant programme – as progressively added to reach, or exceed, the required IPE credits total for that programme.
- Gain a minimum of 6 credits (as at 2019)
- Gain a minimum of 8-9 credits in time (when fully developed, e.g. 2025).

8 Section 8: Standard-setting and accreditation in IPE at Otago

Rationale: A student-centred system of 'credit equivalence' across the various health professional degree programmes in the Division is proposed, to articulate the core IPE curriculum and best accommodate and account for longitudinal learning in a wide range of contexts and sites.

The proposed 'points and credit' system for learning activities creates the foundation for students from different degree programmes to accumulate IPE credits through a matrix of elements and requirements, over the course of a health professional degree programme. The proposed credit system is based on: IPE workload hours, complexity of IPE learning, IPE learning objectives, and IPE learning outcomes.

Overarching recommendation 8a: that IPE credits are allocated to IPE learning activities on the basis of workload hours, complexity of learning, and expected learning outcomes; and registered and monitored via the proposed Learning Activities Register.

Overarching recommendation 8b: that, once the Learning Activities Register is in place and undertaking its functions as in Recommendation 8a, credits are accumulated by students through successful completion of successive IPE learning activities over the course of their health professional pre-registration degree, attaining at least a minimum number of IPE credits by the time they graduate.

It is clear from investigating a wide range of institutions and their various systems, that at Otago - especially given the highly distributed nature of our teaching and learning, and clinical learning - all IPE learning activities need to be able to be cumulatively mapped to some kind of credit system, if we are to make feasible and transparent the attainment by students of an IPE curriculum, utilising a variable, diverse selection of multiple learning opportunities, over the course of a health professional degree.

At Otago, as aligned with the New Zealand Qualifications Framework (NZQF) and the Committee on University Academic Programmes (CUAP) guidelines, one workload point generally represents 10 hours of work for an average student wishing to achieve an average grade. IPE points would be allocated and would accumulate towards credits on the basis of workload hours as just defined, as well as complexity of learning, and learning objectives and outcomes.

The proposal below is a summary of a carefully considered student-centred system of learning activity 'credit equivalence' for IPE at Otago. ***More details, including the rationale, are found in the Full Report; Chapter 6.***

Further conclusions about integration of the IPE Curriculum can be found in the Full report: Chapter 6, and Conclusions 23-26.

The key features of the proposed 'points and credits' system:

Learning activities

- A matrix captures three key elements for each learning activity:

  - Complexity of learning
  - Student workload
  - IP competency domains (learning outcomes) addressed
- Each element is ascribed a number of points
- Points for each element are accrued and converted to credits to simplify the matrix results, 'smoothing out' variation across the different elements; a principle adopted from the student-centred 'Bologna process' concept of credits (European Commission & Bologna Process, 2015) pp10-11)
- A certain number of credits are then applied to each learning activity
- Learning activities are registered in the Learning Activity Register through an application process, and allocated a certain number of credits
- Learning activities of an increasingly wide variety can be successively added to the menu of opportunities through the application process; there are many other potential opportunities, such as online learning activities and student-led learning activities, which are not yet explored.

Students

- Students progressively accumulate credits in a variety of learning opportunities over the course of their degree
- Students can only accrue credits from IPE learning activities that are registered and meet minimum requirements
- Students gain a set minimum number of IPE credits in order to complete their degree (some by a midpoint determined by their programme), having demonstrated that they are collaborative-practice ready as they graduate and enter the workforce; also while meeting discipline-specific accreditation requirements in respect of IPE; and as accommodated suitably within the student's permanent academic record
- The number of IPE credits required by each health professional programme may need to vary: in particular, what we recommend here as a minimum may be insufficient for some of the longer degree programmes.

Examples of calculation of IPE credits by accumulation of points, credits for learning activities and student cumulative credit examples can be found in the full Report; Chapters 6, 9

Additional sub-recommendations: IPE credit equivalence

Sub-recommendation 8c: Points for complexity of IPE learning

The following points are allocated for levels of IPE learning:

- Exposure (case-based, problem-based) = 1 point
- Engagement (simulated or actual patient/client involvement) = 2 points
- Immersion (workplace learning) = 3 points.

Sub-recommendation 8d: Points for IPE student workload

The following points are allocated for IPE student workload:

- 1-10 hours = 1 point
- 11-20 hours = 2 points
- 21-30 hours = 3 points
- 31-40 hour = 4 points
- 41-50 hour = 5 points
- 51-60+ hours = 6 points

Sub-recommendation 8e: Points for IP competency domains (learning outcomes)

The following points are proposed for IP competency domains/learning outcomes:

- 1 IP competency domain/learning outcome is assessed = 1 point
- 2 IP competency domains are assessed = 2 points
- 3 IP competency domains are assessed = 3 points
- 4 IP competency domains are assessed = 4 points
- 5 IP competency domains are assessed = 5 points
- All 6/6 competency domains are assessed = 6 points.

Sub-recommendation 8f: Conversion of Points to Credits

Credits are calculated as the mean of the points totals of three matrix factors (complexity of IP learning, workload hours, and number of IP competency domains covered), also using Swedish rounding – i.e.:

- 3-4 points = 1 credit
- 5-7 points = 2 credits
- 8-10 points = 3 credits
- 11-13 points = 4 credits
- 14+ points = 5 credits

9 Section 9: Evaluation of IPE at Otago

- **Learning activity evaluation:** For IPE learning activities, choice of an available and appropriate outcomes-based instrument, combined from time to time with focus group and/or interview data, is likely to be realistic for evaluation. For complex immersion clinical placement programmes (e.g. in rural locations), input from communities, clinical workplace providers and local stakeholder organisations, are key evaluation components, and a wider range of evaluation is needed.
- **IPE curriculum evaluation**: At the programmatic/IPE curriculum level, the ongoing collation of evaluation information from discrete learning activities will be increasingly important within an overarching evaluation framework, including dialogue and agreement with other programmatic evaluations.

Overarching recommendation 9a: that at learning-activity-level, an appropriate outcomes-based instrument, and at times interview and focus group data, should form the basis of evaluation, with evaluation of complex immersion activities being more extensive.

Overarching recommendation 9b: that at programmatic level, a system of ongoing collation of learning activity evaluation is developed to inform programmatic evaluation.

Evaluation not only aids in establishing and monitoring the effectiveness of IPE programmes, but is also important in exploring where, how, why and for what purpose IPE learning activities or whole programmes are set up. What educators and/or students see as the most important effects of study programmes may not be the same as - or at least may have different emphases from - large education or health delivery institutions, or health and social care providers, and this will differ again from what patients/clients see as critical learning. A range of methods is therefore likely to be needed to make sense of the ongoing evaluation of interprofessional education endeavour. Such comprehensiveness is unlikely to be realistic at learning-activity level, but, despite the challenges, becomes important when evaluating effectiveness and wider influence at a curricular or programme qualification level. ***For more detail about who and how to seek evaluation data in various contexts, see Full report, Chapter 8, Conclusions 27, 28.***

Sub-recommendation 9c: Programmatic evaluation, when IPE curriculum in place

The following components are recommended for programmatic evaluation of an IPE curriculum, once in place:

- Collation and tracking of all IPE learning activity evaluations
- Reporting of collated results – back to IPE learning activity developers, and also to the Division of Health Sciences (through the IPE Centre) and beyond
- Exploration of degree-specific programmatic evaluations already in place
- Dialogue and consideration of IPE elements/competencies
- Health sector and other stakeholder engagement to extend profession-specific programmatic evaluations, over time and as realistic.

END