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Scherpbier, Nynke; Wong, Carmen Ka Man

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Family Medicine (FM) in the undergraduate curriculum: Preparing medical students to work in evolving healthcare systems

Section 3: Integrating FM into the curriculum: how to achieve this

Chapter 18: Interprofessional Learning

Authors:

Nynke Scherpbier, Head of the Department of General Practice and Elderly Care medicine, Professor in General Practice, University of Groningen, Netherlands

Carmen Ka Man Wong, Faculty of Medicine, Assistant Dean (Education) & Associate Professor in Practice (Family Medicine and Medical Education), The Chinese University of Hong Kong, Hong Kong SAR, China

Summary of key learning points

- Collaborative practice is essential for the evolving complexities of health care, and highlights the importance of interprofessional learning (IPL)
- Competencies for interprofessional working include communication, role clarification, teamwork, individual/ family/ community centred care, leadership and conflict management
- Socio-cultural constructivism, Kolb's learning cycle and the Kirkpatrick model of evaluation can help design individual and group learning activities
- Implementation of IPL requires organisational commitment, support and faculty development
- Family Medicine (FM) educators are in a unique position to be key advocates, leaders and role models in IPL.

Defining Interprofessional learning

Interprofessional learning (IPL) is the development of the ability to work collaboratively with other professionals and disciplines.¹ The definition of professionals is wide ranging extending from core health care professionals, e.g., primary care physicians, nurses, physiotherapists, dieticians, pharmacists, psychologists and occupational therapists to other providers supporting care, e.g., administrators and managers.

Inter-professional collaboration occurs when multiple health professionals, of differing skill backgrounds and disciplines, provide a comprehensive service to deliver high quality care by working with patients, families, carers and communities.² Interprofessional education (IPE) occurs when students from two or more professions learn about, from, and with each other to enable effective collaboration and improve health outcomes.³ IPL is a life-long continuum from undergraduate through to continuous professional development. It is a pre-requisite for a collaborative practice-ready health workforce.

Patients are increasingly presenting to family doctors with multiple co-morbid conditions and complex social needs. There is an urgent need for effective interprofessional collaboration, with expert input from multiple professionals, to tailor management and preventative interventions. Interprofessional care teams are essential to navigate the increasing complexities of health care systems, inter agency financing and to identify appropriate local health and community resources for optimising patient care.

In 2008, an international environmental survey of IPE practices in forty-two countries, when defining the educational benefits of IPL, used input from multiple professionals in their local health care contexts exploring their real world experience and insights.² They identified health policy benefits which included improvements in workplace practices, productivity, patient outcomes and safety and staff morale.

Thus, IPL should be seen as not just a component but as a key process in improving the efficiency and effectiveness of primary health care services and patient outcomes. Educators and policy makers should explore the opportunities offered by multi-disciplinary care teams and take advantage of the positive impact of IPL.

The need for interprofessional collaboration is growing due to the complexity of healthcare demands. IPL is key to improving interprofessional collaboration.

Challenges to interprofessional learning and collaborative practice

Every health care environment is unique. Local and regional diversity, unmet health needs, cultural contexts and structural organisational differences shape this unicity. Interdisciplinary and collaborative practice must address local needs and challenges. Although health care professionals may engage with a range of professionals and disciplines, they are not necessarily adequately prepared, or have the essential skills, knowledge and values, to practice collaboratively.⁴ Professions form their own unique culture of language, habits and customs. These lead to differing values and norms making them vulnerable to prejudice and difficulties in understanding and communication.⁵

The skills required to work collaboratively within a team and resolve interprofessional conflicts include effective communication, clarity about boundaries of roles and responsibilities, recognition of weaknesses and the ability to pre-empt problems. There are many competency frameworks for interprofessional collaboration. The Canadian Interprofessional Health Collaborative framework, for example, defines essential competency domains to inform attitudes, behaviours, values and judgements for collaborative practice.⁶ (See Table 1)

Insert table 1 here:

For effective interprofessional collaboration and team working a broad spectrum of competencies should be acquired to develop clear understanding of each other's roles.
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Approaches to Interprofessional learning

Theories on IPL delivery commonly focus on cognition, social-cultural constructivism, intergroup processes and power.⁷ Learning through socio-cultural constructivism occurs when students interact not only with the instructional material but also with professional groups, in interprofessional environments and by sharing and debriefing with peers. Learning is thus contextual and reflective. Students are able to appreciate established and alternative perspectives on health care and on collective, group and individual professional philosophies.⁷

Learning domains can translate to undergraduate or postgraduate teaching and learning outcomes based on the competencies required for collaborative practice.⁶ (See Figure 1)

Insert figure 1 here

Cognition and knowledge are actively constructed. IPE focuses on using diverse activities to address different learning styles either individual or predominant within a profession.

Providing opportunities for interaction is important. In addition to in-person or online lectures, experiential learning is essential. It offers the opportunity for application and reflection.

(Chapter 19) Concrete experiences, e.g., interviews, attachments, visits, and simulations, supported by Kolb's experiential learning cycle, enhance critical reflection, abstract thinking and problem solving.⁸ Intentionally crafted team-based learning interactions, e.g., group discussions, team tasks, shared individual and collective reflections, and project-based assignments, help participants engage with content and, importantly, each other. Careful consideration is crucial to ensure the instructional material and active group learning activities, based on critical thinking and reflection, align with the intended learning outcomes.

Diverse, interactive, experiential IPL opportunities need to be carefully designed to align with the intended learning outcomes.

An important aspect of interprofessional collaboration and education is the presence of power. Power dynamics always exist in interprofessional collaboration, but not necessarily in a negative sense. It is important that learners recognise power dynamics, hidden agendas and their impacts and build a respectful collaborative culture. Social network theory, i.e., the study of people, organisations and their interactions, can help make power dynamics visible. Examining the social constructs underpinning roles and responsibilities, formal and informal relationships, individuals and their interactions, can expose the strong ties and dynamics potentially affecting the network and team working.⁹

Key learning opportunities for interprofessional collaboration include transitions in care, case conferences and quality of healthcare pathways and planning. The intended learning can have a particular focus such as medication management. Reflection with, and feedback from, facilitators help students understand the dynamics, strengths and shortfalls of the health care system and collaborative processes.

The design and implementation of interprofessional education needs underpinning with the relevant educational theories. Power dynamics should be acknowledged.

Implementation and evaluation

Implementation of IPL at undergraduate and postgraduate level requires an action plan. Key steps in implementation are detailed in Table 2.

Insert Table 2 here

During implementation, there are practical considerations both for the organisation and the curriculum. (See Figure 2) These include faculty/organisational support, content development, core teaching and learning principles.

Insert Figure 2 here

Professions and disciplines are traditionally organised in silos and delivered through specific, relatively isolated, training streams. This leads, in both undergraduate and postgraduate environments, to potential barriers to IPL implementation. To develop the necessary interactive learning, education faculty leads from *all* the involved professions must join to contribute. This can be challenging for on-site professionals who may normally have limited interaction.

Implementation can be further complicated by the logistical constraints of scheduling, space, staffing capacity, funding and the relatively complex content. A steering group of core educators from each profession or discipline can help clarify and solve the challenges and sensitivities and support engagement with senior leadership for endorsement and practical resources. Interprofessional competencies must be developed through a shared common professional goal with unified outcomes and integrated processes. An approached based on parallel professionally siloed processes does not work and must be avoided.

Given the wide-ranging impact that IPL can have on patients, family and communities as well as professionals, evaluation should be considered early, before implementation. It must be well- planned from the outset. For IPL and training, mixed modes of evaluation can incorporate pre and post surveys and quantitative surveys such as the Role Performance

Questionnaire¹⁰, Readiness for Inter-professional Learning Scale¹¹ and the Interdisciplinary Education Perception Scale.¹² Kirkpatrick's model of educational outcomes provides a useful framework. It evaluates beyond the knowledge, skills and attitudes acquired by learners to explore behavioural changes in a student's health care practice and aspires to identify outcomes and impact for patients, family and communities.¹³ The call to provide evidence on the impact of IPL on patient outcomes is legitimate. However, this is hard to realise given the broad scope of variables involved in IPE interventions. Dissemination and active sharing of findings with stakeholders across multiple professions can help enhance the IPL culture and instigate further improvements in learning and training programmes.

IPE implementation requires more planning and effort than uni-professional education. All the professionals involved must have a common shared goal and unified outcomes.

Change management

Apart from organisational and educational structural processes, challenges may arise higher up in the health care system from lack of collaborative practice within the faculty or health care environment. It is important to recognise there are wider influences and processes at play. These include challenges such as the structural environment, the design of interactive and collaborative spaces and intangible factors such as working cultures or shared decision-making processes. These can impact on communication strategies across professions and require different approaches to conflict management. In addition, institutional support in terms of governance models, personnel policies, operating procedures, protocols and practices may affect change management.

When negotiating a shared goal and plan for IPL, it is crucial to devote time to exploring the different stakeholder perspectives and the required policies and procedures. At a macro level, the planning, commissioning and financing of services influences how health and educational systems work together. The formal tasks and responsibilities across healthcare professionals can vary between countries and lead to different collaborative constructions.^{2,14}

FM academics have important roles in research, teaching, administration and leadership. (Chapter 5) They can impact significantly as catalysts to motivate governmental support for progressing IPL. Improving the ecosystem of collaborative practice can impact on education and help resolve barriers to IPL.¹⁴

The sustainable success of interprofessional education depends on changes at higher system levels. FM Academics can be important catalysts to achieving this

Advocacy and leadership in Family Medicine

FM with its holistic view of person-centred medicine provides an excellent environment to learn about collaborative work within the primary care team and how care is coordinated between professionals. FM educators are ideal advocators for collaborative practice and are key leaders in carrying out IPL. Given inherent differences in health care systems, cultural contexts and educational arenas, the starting point for IPL programmes will be different. It requires a strong understanding of the resources available to promote change. FM is well placed to see the health care system from a bird's eye perspective and build an understanding of how care providers relate to each other.¹⁵ This advantage places FM in an excellent position to pioneer IPE endeavours.

Family Medicine with its holistic person centred and primary care team based approach is in an ideal position to facilitate IPL.

Conclusion

The evolving complexity of health care, delivered across health and social sectors within local contexts and constraints, demands effective collaborative working. IPL is an important prerequisite to producing a collaborative practice-ready workforce. It should be mandatory training for professions, disciplines and skilled workers in the health care arena. Medical educators should be active advocates of IPL . FM educators are in a prime position to role model collaborative learning and interprofessional working in education and practice.

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Table 1. Competency framework for interprofessional collaboration⁶

Role clarification
Team functioning
Interprofessional communication
Patient/client/family/ community-centred care
Interprofessional conflict resolution
Collaborative leadership

Table 2. Actions for implementation of interprofessional learning and education

- | |
|---|
| <ol style="list-style-type: none">1. Agree to common vision and purpose for IPE with key stakeholders across all faculties and organisations2. Develop IPE curricula3. Provide organisational support for development and delivery4. Introduce IPE into all undergraduate and postgraduate programmes5. Ensure staff training and competency in developing, delivering and evaluating programmes6. Ensure continuous commitment to IPE |
|---|

Figure 1. Example of Interprofessional learning domains and learning outcomes

Domain	Learning outcome (examples)
1. Teamwork	<ul style="list-style-type: none"> ▪ Ability to be both team leader and team member ▪ Knowledge of team dynamics and barriers to teamwork
2. Roles and responsibilities	<ul style="list-style-type: none"> ▪ Knowledge of own professional role, responsibilities and expertise ▪ Knowledge of other professional roles, responsibilities and expertise
3. Communication	<ul style="list-style-type: none"> ▪ Active listening and expressing own knowledge and expertise competently to different professions ▪ Negotiating a joint care plan
4. Learning and critical reflection	<ul style="list-style-type: none"> ▪ Critically reflecting on own performance and relationship with others
5. Relationship with, and recognising the needs of the patient	<ul style="list-style-type: none"> ▪ Effective engagement with patient, family carers and communities ▪ Collaborative care planning with multiple professionals
6. Ethical practice	<ul style="list-style-type: none"> ▪ Acknowledge each professional views and opinions are equally valid and important ▪ Foster IPL culture at work

Figure 2

Practical considerations for implementation of interprofessional learning and education

PRACTICAL CONSIDERATIONS:
<p>Organisational</p> <ul style="list-style-type: none">▪ Develop a Taskforce with representation from the different professions involved▪ Seek senior leadership commitment and institutional support▪ List organisation support in terms of human and financial resources▪ Develop learning strategy for education & training and in daily practice▪ Identify individual and departmental champions and advocates▪ Ensure staff training to build interprofessional learning culture serving students across professions, so also the professions that are different from that of the individual staff member
<p>Curricular</p> <ul style="list-style-type: none">▪ Develop shared objectives with interpretation relevant to the profession▪ Co-construct programme content from scratch with different professions▪ Develop well-constructed learning outcomes that delineate knowledge, skills, attitudes and behaviour▪ Utilise diverse learning methods to cater to different learning styles▪ Contextualise learning with real world experience and insights and group interaction▪ Design assessments to include individual and group projects, tasks and reflection▪ Align scheduling, logistics and coordination▪ Seek technical and administrative support