Interprofessional Education and Care

This article discusses the ways in which interprofessional education (IPE) is supported by educational theory and summarizes the increasing evidence for its effectiveness in transforming health-care organizations, leading to increased staff motivation and direct improvements in patient care.

A shared language and conceptual framework is essential to successful interprofessional collaboration. The World Health Organization's International Classification of Functioning, Disability and Health (ICF) provides a shared language and conceptual framework that transcends traditional disciplinary boundaries. This paper will familiarize readers with the ICF and describe the biopsychosocial perspective that is adopted in its conceptual framework and language. The presentation of a case study will illustrate how the ICF can enhance interprofessional learning by promoting a multidimensional perspective of an individual's health concerns. The case study will also highlight the value of the shared language and conceptual framework of the ICF for interprofessional collaboration. It is argued that a strong foundation in the principles exemplified by the ICF may serve to enhance interprofessional communication, and in so doing, encourage involvement in interprofessional collaboration and healthcare.

This article discusses bi-monthly interprofessional clinical teaching workshops which were derived from patient experiences in an acute care hospital after a one-year planning phase. Students utilized a problem-based methodology to analyze a ward case from an interprofessional perspective. The article supports that this half-day learning model can be easily supported by clinical staff.

This website includes resources for clinicians and teachers to learn about the importance of interprofessional practice, interprofessional education in the news, and events taking place. In addition is includes opportunities for discussion forums, faculty exchange, and provides links to other key resources.

Health Canada (the federal government department in Canada responsible for health issues) conducted an environmental scan and research report in order to understand interprofessional education and collaborative patient-centered practice. This initiative was implemented through semi-structured telephone interviews utilizing grounded theory analysis. Several themes were generated and grouped according to interprofessional education and collaborative practice initiatives.

Editorial: The Editor-in-Chief of the Journal of Interprofessional Care discusses the articles presented in this issue, stating that each article presents a unique perspective regarding the theme of interprofessional education and collaborative practice.

This is a summary of findings from a Systematic Review reported in:

With recommendations based on analysis and arguments developed in that book and its companion volume:


Interprofessional education (IPE) is being built into the mainstream of professional education for all health and social care professions throughout the United Kingdom driven by the Labor government elected in 1997. This paper suggests some ways to ease constraints and improve outcomes while improving interprofessional learning opportunities. It poses the question, can IPE be sustained within mainstream professional education once the initial enthusiasm ends?


This article discusses the shift from a “one professional: one patient” care model to a “many professionals: one patient” model.


This paper describes experience gained during the five-year implementation period of this study. Empirical data was collected through participatory observations, students' and tutors' evaluations, and group interviews with tutors and faculty leaders. Lessons learned can be summed up as: time, resources. staff consensus in dealing with and overcoming traditions and attitudes. Another lesson learned was that the students' learning is a socialization process which needs to be developed over time; intermittent interprofessional interventions during the three-year period was found to be inadequate, and the tutor role is essential in order to support the students' learning process.


The national continuous quality assurance tool for mental health education and training has recently been developed. This paper describes the planned implementation of the tool across NHS Workforce Development Confederations (WDCs) in England. Large stakeholder groups in 15 WDCS were convened. The groups rated 29 programmes across a range of provisions including pre-qualifying programmes (social work and mental health nursing), post-qualifying programmes, new graduate mental health worker programmes and programmes run within NHS Trusts. Overall, the results indicate that the majority of rated programmes are relevant to the policy agenda and involve service users in a meaningful way. However, courses are less likely to engage with carers and to assess the impact of the programmes. Key factors are identified that promote the implementation of the new quality assurance tool and key barriers to implementation are also elicited. The paper concludes that the tool can provide a useful framework to assess the quality of a broad range of mental health education, furthermore, that it should be incorporated into existing quality assurance systems.

Carlisle, C., Cooper, H., & Watkins, C. (2004). "Do none of you talk to each other?": The challenges facing the implementations of interprofessional education. *Medical Teacher, 26*(6), 545-545-552.
The aim of this study was to explore the feasibility of introducing interprofessional education (IPE) within undergraduate health professional programs. This paper discusses and reports findings from focus-group interviews. There was an overall consensus that IPE had potential to break down barriers to team working.

Currently, much of the literature available on interprofessional education (IPE) is descriptive and atheoretical. To advance practice and research in the field it will be important to develop theoretical frameworks. This article discusses the role that theory might play in advancing IPE and then discusses 5 different approaches for guidance in developing an IPE framework.

This article provides an overview of interprofessional education in Canada and models that are currently being employed. It also discusses the idea that the lack of convincing evidence of the effectiveness of existing programs is the most serious problem for the expansion of interprofessional education. The most frequently utilized model involves a mandatory experience, which is case-based, and involves all the students registered in health faculties.

His paper reports findings from an evaluation which focused on narrowing the gap between theory and practice. Findings showed that service users can make an important contribution to IPE for health and social care students in the early stages of their training. By exposure to a service user perspective, first year students can begin to learn and apply the principles of teamwork, to place the service user at the center of the care process, to make connections between theory and "real life" experiences, and to narrow the gap between theory and practice. Findings also revealed benefits for facilitators and service users.


In investigating why uptake of interprofessional course offerings at City University was low among social work students, the authors discovered wider issues affecting interprofessional working. These issues related to funding, organization and practicality of interprofessional work.

The introduction and successful implementation of the interprofessional education approach is dependent on a variety of factors, including the attitudes of students, faculty, senior academic administrators and practitioners. The purpose of this study was to examine attitudes towards interprofessional teamwork and interprofessional education amongst academic administrators of post secondary health professional education programs in Canada. A web-based questionnaire was distributed via e-mail.

The goal of this literature review was to identify conceptual frameworks that could increase an understanding of interprofessional collaboration and interprofessional relationships within health care organizations. Definitions and theoretical frameworks were explored in an effort to discover underlying concepts of collaboration and theoretical frameworks utilized.
This paper introduces the concept of “interprofessionality” and contrasts this concept with the idea of "interdisciplinarity". "Interdisciplinarity" concerns the development of integrated knowledge in response to fragmented disciplinary knowledge. "Interprofessionality" concerns the processes and determinants that influence interprofessional education initiatives as well as determinants and processes inherent to interprofessional collaboration.

This article examines several learning approaches that can help the Interprofessional Education initiative fulfill its expectations. The first approach involves the transfer of learning novel situations. The second approach emphasizes that the learning situation needs to be structured using the five elements of best-practice cooperative learning: positive interdependence, face-to-face-promotive interaction, individual accountability, interpersonal and small-group skills, and group processing. The third approach emphasizes that the learning process should come from an experiential learning framework.

Published papers compiled by Dewitt and Baldwin. Papers are organized by category and chronological order.

This editorial seeks to review the extent to which the journal, Learning in Health and Social Care, has contributed to issues relating to interprofessional learning. It also seeks to explore why the "forum" section of the journal, which was created for readers to make short contributions and comments, was so underutilized.

A quarter of family physicians in Saskatchewan volunteered to participate in an initiative to implement best practices in the treatment of diabetes and CAD. After one year, there was an increase in the number of patients receiving the recommended drugs, tests and services, and a decrease in wait time for physician appointments. The Saskatchewan Medical Association is working with the provincial government to increase physician payment for chronic disease management for those who follow best practice guidelines and report on results.


The MOSES program was developed to provide training in response to concerns about the quality of team care in maternity care. Its aim is to improve teamwork skills and highlight the role that human behavior can play in crisis prevention and resolution. While course evaluations show that participants enjoyed and valued the program, no evaluation has been conducted to determine its effect on the delivery of maternity services.

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In 2004, leaders at The Centre for Health Sciences at George Brown College (GBC) in Toronto, Canada, identified implementation of interprofessional education initiatives to be a priority. This report describes the components of the IPE initiative, details of its related evaluation project, and initial findings.

This article discusses the barriers to implementing an interprofessional education approach for patient-centered collaborative practice within universities. The article also discusses structural changes that need to be made within universities in order for an interprofessional education approach to be successful.

PURPOSE: To identify essential elements of effective interdisciplinary training through an evaluation of the University of North Carolina's Student Health Action Coalition (SHAC), an interdisciplinary service learning program for health science students. METHOD: In 2004, 516 SHAC volunteers were asked to complete a 52-item, online questionnaire. Responses were tallied by volunteer role, and four of the resulting "divisions" (counseling, medical care, interpretation, and community outreach) were analyzed using qualitative and quantitative rating schemas. The four divisions were compared on volunteers' perception of two concepts: (1) the level of interdisciplinary training achieved and (2) the potential for working together, or "community capacity." RESULTS: A total of 283 students accessed the online questionnaire, and 281 provided consent and filled out some portion of the questionnaire, an overall response rate of 54%. A total of 159 of the 281 respondents (57%) reported volunteering most often for one of the four divisions of interest. The respondents in each volunteer division reported a level of interdisciplinary training similar to that division's level of community capacity. The division responsible for counseling services indicated the least interdisciplinary training, earning 4 points on an 8-point rating schema. This group also reported low levels of participation, group skills, information sharing, shared values, sense of community, and social networks. The community outreach division reported the highest level of interdisciplinary training, receiving 8 out of 8 points. They also had high levels of participation, group skills, information sharing, networking, and sense of community. CONCLUSIONS: Effective interdisciplinary training goes hand in hand with five elements identified from the community capacity literature: participation, training in group skills, information sharing, networking, and critical reflection. Program planners and evaluators should pay particular attention to the social environment so as not to reinforce professional stereotypes that interdisciplinary programs are meant to dispel.

This paper highlights a variety of issues from the organizational change literature that are especially relevant to the implementation initiatives in interprofessional education (IPE) for collaborative practice (CP). The paper discusses these issues at the level of the individual, organization, and system. The paper concludes with a set of key recommendations suggested for reducing the incidence of implementation failure.

Each health care profession has a different culture. As students progress throughout their education, common values from their respective professions are reinforced, which leads to increased specialization within each professional group. However, this specialization contributes to decreased
interprofessional teamwork. Insight into the educational, systemic, and personal factors which contribute to the culture of the professions can help guide the development of innovative educational methodologies to improve interprofessional collaborative practice.


A seminar course was developed at the University of Ottowa in order to address the need for collaboration within the area of palliative care. This course utilized popular literature as a basis for learning. Evaluation findings suggest that meaningful interprofessional education can be introduced effectively to students prior to or while they are maturing in their professional roles.


PURPOSE: This article examines literature on interdisciplinary education and teamwork in health care, to discover the major issues and best practices. MAIN FINDINGS: Two issues are emerging in health care as clinicians face the complexities of current patient care: the need for specialized health professionals, and the need for these professionals to collaborate. Interdisciplinary health care teams with members from many professions answer the call by working together, collaborating and communicating closely to optimize patient care. Education on how to function within a team is essential if the endeavour is to succeed. Two main categories of issues emerged: those related to the medical education system and those related to the content of the education. CONCLUSIONS: Much of the literature pertained to programme evaluations of academic activities, and did not compare interdisciplinary education with traditional methods. Many questions about when to educate, who to educate and how to educate remain unanswered and open to future research.


This article describes a simple method for creating teaching cases from clinical data, radiologic images, surgical images, and images from pathologic slides that are presented at tumor board conferences. This system improves the efficiency and accuracy in gathering patient histories when care is transferred among clinics, the emergency department, and wards.


The extent to which health and social care (HSC) students hold stereotypical views of other HSC professional groups is of potential importance to team working in health care. This paper explores students' perceptions of different HSC professional groups at the beginning and end of their university programs. The implications of the similarities and differences discussed could potentially have an impact of interprofessional interactions, role boundaries, and team working.


This brief article gives tips for team building which include: clear expectations, context, commitment, competence, charter, control, collaboration, communication, creative innovation, consequences, coordination, and cultural change.


The Interdisciplinary Women's Health Clinic (IWHC) was established at Yale University School of Medicine to allow for an interdisciplinary women's health training and education model. The IWHC
was developed as a consultation service that augmented the primary care provided to low-income, minority-group women in an established outpatient primary care setting. The article describes the structure, function, and evolution of that training model up to its closure in 2000, when the Yale Department of Health and Human Services contract ended.


Editorial: The author, Co-Chair of the Health Canada National Expert Committee on Interprofessional Education for Collaborative Patient-Centered Practice, discusses the importance of implementing interprofessional education in health care education programs being that increasingly more health care providers are expected to work as a team in practice. The author also discusses and defines collaborative patient-centered practice.


The purpose of the article was to evaluate the impact of the Downstate Team-Building Initiative (DTBI), a model multicultural and interdisciplinary health care team-building program for health professions students. DTBI successfully united students across health discipline, ethnicity, socioeconomic class, gender, and sexual orientation into functioning teams. The model represents an effective approach to teaching health care team building and demonstrates benefits in both preclinical and clinical years of training.


The University of Auckland's Faculty of Medical and Health Sciences have created an interdisciplinary learning initiative for their undergraduate medical, nursing and pharmacy students. The program brings the students together for two learning modules, one focused on Maori Health and the other on Patient Safety.


This article describes the development of CLARION, a student-run organization at the University of Minnesota which is dedicated to furthering interprofessional education for health professions students. Through engaging students, faculty, and health care professionals, CLARION creates extracurricular and interprofessional experiences for students. This organization has prompted faculty to reexamine traditional health professions curricula.


This article highlights the relationship between traditional, complementary, and alternative medicine (TCAM) and biomedicine, and the challenges this relationship poses to patients. Medical professionals tend to represent these systems dualistically - as mutually exclusive and in competition with one another. Patients, on the other hand, tend to make truly pluralistic health care decisions - moving freely between TCAM and biomedicine based on what they can access, what they can relate to, and what they believe works. Using their experience with Mexican immigrant and Mexican-American populations in Southwestern United States, the authors discuss strengths and weaknesses in both healthcare systems, and how medical dualism can be a significant barrier to effective healthcare. Recent literature on medical pluralism is discussed from the public health (i.e., community) and medical (i.e., provider) perspectives. These two disciplines are brought together in an attempt to deconstruct the notion that TCAM and biomedicine are diametrically opposed healthcare systems. Biomedically trained health care providers must understand, appreciate, and integrate into their practice how their patients make use of other healing practices and beliefs. Such
integration is particularly essential when serving immigrant or minority populations as these groups are more likely to use a pluralistic approach in meeting their health needs.


There is controversy about interprofessional education in health care in general and in palliative care. This evaluation aimed to explore (1) the career progression of former students who attended an interprofessional MSc in palliative care; (2) the activities former students were engaged in as a result of attending the course; and (3) the experience of attending an interprofessional postgraduate course in palliative care.


The goal of this study is to assess the effectiveness of education in IPE for clinical faculty who teach and practice in clinical settings. The primary objective is to measure the effectiveness of a Faculty Development Program on Interprofessional Education (FDP-IPE) on the faculty's knowledge, skills, attitudes (KSA) related to teaching IPE for collaborative practice. Our secondary objective is to create interprofessional clinical placement opportunities for medical trainees and other health professional learners at the University of Toronto.

Ladden, M. D., Bednash, G., Stevens, D. P., & Moore, G. T. (2006). Educating interprofessional learners for quality, safety, and systems improvement. *Journal of Interprofessional Care, 20*(5), 497-497-505. Until recently, knowledge and skills necessary for systems improvement in the health professions was not included in formal educational curricula. In addition, interprofessional collaboration was not taught as a means to improve systems. Achieving Competence Today (ACT) was designed as a new model for interprofessional education for quality, safety, and health systems improvement. This paper describes the ACT program and curriculum model and makes recommendations for the future.

Lahey, W., & Currie, R. (2005). Regulatory and medico-legal barriers to interprofessional practice. *Journal of Interprofessional Care, 19*(Supplement 1), 197-197-223. This paper discusses potential legal ramifications of implementing interprofessional practice in Canadian health care. The two major legal issues likely to inhibit health care professionals from working together on an interprofessional basis are: laws under which health care professionals are regulated and the law of professional malpractice. The authors of this paper propose three strategies designed to minimize the risk of malpractice claims due to the legal constructs currently employed by the courts of Canada.

Lindqvist, S., Duncan, A., Rout, J., Watts, F., & Pearce, S. (2005). Interprofessional education for undergraduate health care students throughout their training. *Journal of Interprofessional Care, 19*(2), 175-175-176. Since 1992 The University of Hawaii, John A. Burns School of Medicine has offered community-based interprofessional training, with the intention that physicians would choose primary care specialties, work in community care settings, and work well as interdisciplinary teams. This study was conducted to look at the effects of CBIT on the choice of career paths for participating students.

Lindqvist, S., Duncan, A., Shepstone, L., Watts, F., & Pearce, S. (2005). Case-based learning in cross professional groups- the development of a pre-registration interprofessional learning program. *Journal of Interprofessional Care, 19*(5), 509-509-520. This paper describes the development and evaluation of an interprofessional learning (IPL) program at the pre-registration level. The aim of the study was to investigate whether case-based learning in cross-professional groups is a feasible and an effective way to conduct interprofessional education (IPE). The findings in this paper reported that the method used in this paper was a feasible and effective way to deliver IPE.
Interprofessional training has been suggested as a means of preparing medical students for team health care, but the effects of such training have not been carefully studied. A multidisciplinary training programme in ambulatory diabetes care was developed to promote positive attitudes towards team care. Programme effects were assessed by a questionnaire which asked medical students to indicate their willingness to delegate or share 25 specific clinical tasks with a nurse. Following programme participation, students' willingness to share responsibility increased significantly for seven of the 25 tasks. To test the hypothesis that this effect resulted from the assignment of a teaching role to nurses, selected seminar content was taught by doctors or nurses on a random basis. No differences in willingness to share responsibility were related to which professional taught the seminar content. However, students were more willing to share responsibility with a nurse when they thought they had learned that topic from a nurse, suggesting that their experience in observing nurses at work may have been important in influencing attitudes towards team care.

Nine students from seven different health care disciplines associated with the Toronto Rehabilitation Institute participated in an IPE clinical placement in the winter of 2005 on Toronto Rehabilitation's Stroke inpatient unit. These students participated in interprofessional group sessions led by different health care professionals. This paper discusses the students' perspectives on this IPE experience and the corresponding benefits and challenges.

Successful collaboration in health care teams can be attributed to several determinants, including interactional determinants, organizational determinants, and systemic determinants. This article presents a review of the literature that discusses each of these determinant types and highlights main characteristics of each of these. Then the article presents a "showcase" of Canadian policy initiatives (The Canadian Health Transition Fund) in order to illustrate how these determinants can be utilized in practice.

This article discusses the role of interprofessional education in preparing all health care professional students for the workforce. Interprofessional education provides appropriate methods for learning interprofessionalism, which will ultimately contribute to overcoming uni-professional exclusivity.

The Institute of Medicine has a vision for health professions education to work collaboratively as a means to provide patient-centered care and as a means to improve the quality of care. The article addresses the questions: how can medical schools work with other health-sciences schools to promote their educational, research, and service missions? Strategies are also suggested for other institutions seeking to implement an interprofessional health sciences program.

This study was conducted to determine the efficacy of postoperative interdisciplinary care,
compared to usual care, in elderly patients with hip fracture. The study found that interdisciplinary care did not result in better 3 or 6 month outcomes in patients with hip fracture.

This paper is the second of two papers which discusses the key elements of Interprofessional Education (IPE). It is based on a literature review conducted for Health Canada relating to its "Interprofessional Education for Patient Centered Practice (IECPCP) initiative. This paper discusses micro level, meso level, and macro level factors that influence the success of an IPE initiative. The paper also discusses outcome measurements that can be used within the IPE framework.

This paper describes the evolution of the University of Alberta's Interprofessional Initiative over the past decade and describes future directions. More specifically, attention is given to the administrative and academic structures and processes required to launch, develop, and sustain an initiative such as this.

An interdisciplinary continuous process improvement team developed an educational intervention for physicians, nurses, and other healthcare professionals that focused on the role of medications in the etiology of delirium among hospitalized patients aged 65 years and older. An analysis of prescribing practices after the educational intervention revealed a reduction in the use for 57% of the drugs targeted. Other outcomes from this process improvement methodology are also examined.

Interprofessional education (IPE) is advocated as one way of improving health care communication for the development of interprofessional care. A multidisciplinary and cross university project was designed to identify opportunities for, and best practice in, IPE communication skills amongst undergraduate health care practitioners within one Workforce Development Directorate (WDD) in England. Based on the findings, recommendations are made for the planning, implementation, and evaluation of IPE in communication skills.

To meet the growing global demands of caring for the increasing numbers of patients with chronic conditions, we need to develop a new approach to training. Traditional models of acute care are inadequate for training a workforce to manage today' most prevalent health problems: chronic conditions.

Promoting cultural competency in health care was examined from the Canadian perspective, which explored practice environments and educational programs for future health professionals that foster cultural awareness and support culturally sensitive care. The main theme that was generated was the use of a participatory action approach to foster collaboration with patients, traditional healers, and the community. Interprofessional teams should not only comprise partners from all available health professions, but should also include aboriginal paraprofessionals.

Literature review to assess the effectiveness of IPE interventions and educational programs in which the same health and social care professionals learn separately; and to compare the effectiveness of IPE interventions compared to no educational intervention.


This study was designed to explore patient's experiences of interprofessional primary healthcare at Toronto Western's Family Health Center (part of University of Toronto), where care is provided by a variety of health professionals.


This paper draws on a Scottish study which looked at the responses of local authorities, schools and other local agencies to student's challenging behaviors which stem from poor mental health. Specifically, it explores how the presence of individuals from other agencies impacted the school's ability to respond to such behavioral issues.


Interprofessional education for collaborative patient-centered practice has been identified as a key mechanism to address health care needs and priorities. Faculty development plays a significant role in the promotion of interprofessional education (IPE). This paper addresses barriers to teaching and learning, various approaches to facilitate IPE, and models to implement.


This article describes the outcomes of a two-year project, commissioned by the Department of Health, to investigate the development of pre-registration education for the allied health professions in Kent, Surrey, and Sussex, England. It was found that IPE is highly contextualized, and develops according to a variety of situational factors.


This paper explored issues associated with evaluating interprofessional education (IPE) programs. Qualitative and quantitative approaches are suggested. An example of the Rural IPE (RIPE) project is provided which recommends an interdisciplinary approach to evaluating IPE programs.


This article creates a case for the importance of interprofessional education (IPE) and discusses the state of interprofessional education currently. In addition, the article provides models, learning outcomes, examples, evaluation, and barriers to IPE.


An evidence-based, interprofessional educational course involving first-year undergraduate students
at the University of Liverpool. Part of the course involved an online format. A focus group was conducted to understand the e-learning writing experience. Team working contributed to the success of the writing process, reflecting the theme of inter-professionally.

New graduates will be required to provide high-quality patient care to patients with chronic diseases and will treat more racially and ethnically diverse patients. The medical education programs need to address these challenges and prepare the future medical professionals.

This study addresses leadership in interprofessional collaboration in childcare services (residential care). The aim was to explore the managers' experiences and present their views on how they exercised leadership in the residential institutions as well as how they organized and facilitated collaboration with relevant professionals and service users. The main findings were related to the managers' experiences of linked processes of leadership and collaboration, perceptions of the structures of communication, their responsibility as well as the interaction processes.

The Level of Care Intervention Study (LOCIS) project is a 4-week reorganization and interprofessional training, developed in response to concerns that in-patients in medical wards at a South African teaching hospital were receiving "routinized" care, rather than patient-specific care. LOCIS's goal was to improve teamwork, communication, and collaboration to provide better patient care. The impact of the program was measured against usual care in an adjacent ward. The evaluation contained 4 elements: team building, staff reorganization, a shift from task to team nursing, and patient planning.

Interprofessional education (IPE) offers a way for professionals to work together. This study sought to assess the usefulness of IPE interventions compared to education in which the same professions were learning separately from one another.

There is little empirical research evidence available regarding the effects of pre-licensure interprofessional education on patient/client care. There is an increasing body of evidence regarding the positive effects of post-licensure interprofessional education on patient/client care, however, the evidence is still weak. In order to guide practice in the future, it will be important to implement pre-licensure and post-licensure interprofessional education with accompanying rigorous evaluation research.