

## IPE Models and Theories

- Adams, S. G., Smith, P. K., Allan, P. F., Anzueto, A., Pugh, J. A., & Cornell, J. E. (2007). Systematic review of the chronic care model in chronic obstructive pulmonary disease prevention and management. *Archives of Internal Medicine*, 167(6), 551-551-561.  
While implementation of the chronic care model (CCM) has been shown to be an effective preventative strategy to improve outcomes in diabetes mellitus, depression, and congestive heart failure, data is lacking in regards to its effectiveness for chronic obstructive pulmonary disease (COPD). A literature review was conducted to explore the resources available regarding the CCM and COPD.
- Ahluwalia, S., Clarke, R., & Brennan, M. (2005). Transforming learning: The challenge of interprofessional education. *Hospital Medicine*, 66(4), 236-236-238.  
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.
- Allan, C. M., Campbell, W. N., Guptill, C. A., Stephenson, F. F., & Campbell, K. E. (2006). A conceptual model for interprofessional education: The international classification of functioning, disability and health (ICF). *Journal of Interprofessional Care*, 20(3), 235-235-245.  
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.
- Anderson, E., Manek, N., & Davidson, A. (2006). Evaluation of a model for maximizing interprofessional education in an acute hospital. *Journal of Interprofessional Care*, 20(2), 182-182-194.  
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.
- The chronic care model :: Improving chronic illness care*. Retrieved 10/31/2008, 2008, from [http://www.improvingchroniccare.org/index.php?p=The\\_Chronic\\_Care\\_Model&s=2](http://www.improvingchroniccare.org/index.php?p=The_Chronic_Care_Model&s=2)  
This website provides information on the Chronic Care Model, topics include the Health System, Delivery System Design, Decision Support, Clinical Information Systems, Self-Management Support, and The Community.
- Clark, P. G. (2006). What would a theory of interprofessional education look like? some suggestions for developing a theoretical framework for teamwork training 1. *Journal of Interprofessional Care*, 20(6), 577-577-589.  
Currently, much of the literature available on interprofessional education (IPE) is descriptive and a-theoretical. 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.

Cook, D. A. (2005). Models of interprofessional learning in Canada. *Journal of Interprofessional Care*, 19(Supplement 1), 107-107-115.

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.

Cooper, H., & Spencer-Dawe, E. (2006). Involving service users in interprofessional education narrowing the gap between theory and practice. *Journal of Interprofessional Care*, 20(6), 603-603-617.

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 team work, 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.

D'Amour, D., Ferrada-Videla, M., Martin-Rodriguez, L. S., & Beaulieu, M. D. (2005). The conceptual basis for interprofessional collaboration: Core concepts and theoretical frameworks. *Journal of Interprofessional Care*, 19(Supplement 1), 116-116-131.

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.

Freeth, D., & Reeves, S. (2004). Learning to work together: Using the presage, process, product (3P) model to highlight decisions and possibilities. *Journal of Interprofessional Care*, 18(1), 43-56. doi:10.1080/13561820310001608221

Collaborative practice is seen as a core aspect of professional practice and, therefore, a focus of professional education. Current interprofessional and quality assurance literature provides enumeration and discussion of a range of competencies required for effective collaborative practice. Case studies of education and training related to collaborative competences rarely discuss the nature of influences on development, delivery and learning. Barriers to development and delivery have been identified for interprofessional education, but we want to move beyond the mental picture of climbing over or moving around fixed hurdles. Learning opportunities are complex dynamic systems, seeking equilibrium. The creative tension of influences provides opportunities for insightful management. This paper uses the systems-form 3P (presage-process-product) model of learning and teaching (Biggs, 1993) to help examine the nature of educational opportunities designed to promote collaborative working. Presage, process and product factors are identified and discussed. We argue that untangling (or at least seeing) the web of influences on learning to work together promotes critical awareness and encourages more informed and timely decisions.

Gitlin, L. N., Lyons, K. J., & Kolodner, E. (1994). A model to build collaborative research or educational teams of health professionals in gerontology. *Educational Gerontology*, 20(1), 15-15-33.

A five-stage model of collaboration is presented which utilizes key constructs from the social exchange theory and literature relating to team building. The model presented ensures that projects are based on gerontological knowledge, integration of theory, and reflect real-life health care needs of the elderly.

Hean, S., & Dickinson, C. (2005). The contact hypothesis: An exploration of its further potential in interprofessional education. *Journal of Interprofessional Care*, 19(5), 480-480-491.

The Contact Hypothesis is a useful theoretical framework to address challenges that face researchers who wish to build the evidence base around interprofessional education (IPE). This

article briefly describes the theory and closely-related theories of social identity and categorization. The application of the Contact Hypothesis to interprofessional education is also described.

- Henrich, J. B., Chambers, J. T., & Steiner, J. L. (2003). Development of an interdisciplinary women's health training model. *Journal of Medical Education, 78*(9), 877-877-884.  
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.
- Hodnett, E. D. (2000). Continuity of caregivers for care during pregnancy and childbirth. *Cochrane Database of Systematic Reviews (Online), (2)*(2), CD000062. doi:10.1002/14651858.CD000062  
BACKGROUND: Care is often provided by multiple caregivers, many of whom work only in the antenatal clinic, labour ward or postnatal unit. However continuity of care is provided by the same caregiver or a small group from pregnancy through the postnatal period. OBJECTIVES: The objective of this review was to assess continuity of care during pregnancy and childbirth and the puerperium with usual care by multiple caregivers. SEARCH STRATEGY: The Cochrane Pregnancy and Childbirth Group trials register was searched. SELECTION CRITERIA: Controlled trials comparing continuity of care with usual care during pregnancy, childbirth and the postnatal period. DATA COLLECTION AND ANALYSIS: Trial quality was assessed. Study authors were contacted for additional information. MAIN RESULTS: Two studies involving 1815 women were included. Both trials compared continuity of care by midwives with non-continuity of care by a combination of physicians and midwives. The trials were of good quality. Compared to usual care, women who had continuity of care from a team of midwives were less likely to be admitted to hospital antenatally (odds ratio 0.79, 95% confidence interval 0.64 to 0.97) and more likely to attend antenatal education programs (odds ratio 0.58, 95% confidence interval 0.41 to 0.81). They were also less likely to have drugs for pain relief during labour (odds ratio 0.53, 95% confidence interval 0.44 to 0.64) and their newborns were less likely to require resuscitation (odds ratio 0.66, 95% confidence interval 0.52 to 0.83). No differences were detected in Apgar scores, low birthweight and stillbirths or neonatal deaths. While they were less likely to have an episiotomy (odds ratio 0.75, 95% confidence interval 0.60 to 0.94), women receiving continuity of care were more likely to have either a vaginal or perineal tear (odds ratio 1.28, 95% confidence interval 1.05, 1.56). They were more likely to be pleased with their antenatal, intrapartum and postnatal care. REVIEWER'S CONCLUSIONS: Studies of continuity of care show beneficial effects. It is not clear whether these are due to greater continuity of care, or to midwifery care.
- Hroscikoski, M. C., Solberg, L. I., Sperl-Hillen, J. M., Harper, P. G., McGrail, M. P., & Crabtree, B. F. (2006). Challenges of change: A qualitative study of chronic care model implementation. *Annals of Family Medicine, 4*, 317-317-326.  
The Chronic Care Model (CCM) works to improve health care for patients with chronic conditions. Small changes were seen with the implementation of the CCM with many identifiable barriers. It was found that there are many organizational challenges with the transformation of health care with the CCM because it is not a specific model.
- Hudson, B. (2007). Pessimism and optimism in inter-professional working: The sedgefield integrated team. *Journal of Interprofessional Care, 21*(1), 3-3-15.  
The literature on inter-professional working tends to be dominated by explanations for lack of progress rather than accounts of achievements. This paper develops two models, termed the optimistic and pessimistic models respectively, to understand the factors that may underpin different rates of interprofessional achievement. A case study is utilized to test the models.
- Johnson, A. W., Potthoff, S. J., Carranza, L., Swenson, H. M., Platt, C. R., & Rathbun, J. R. (2006). CLARION: A novel interprofessional approach to health care education. *Academic Medicine, 81*(3),

252-252-256.

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.

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.

Mackay, S. (2004). The role perception questionnaire (RPQ): A tool for assessing undergraduate students' perceptions of the role of other professions. *Journal of Interprofessional Care, 18*(3), 289-289-302.

A systematic review of interprofessional education revealed that there were many weaknesses in the current body of knowledge of interprofessional education outcomes. This paper discusses the range of tools that were found in the literature and describes the production and validation of two questionnaires that can be used as part of an interprofessional evaluation strategy.

Madden, T. E., Graham, A. V., Straussner, S. L., Saunders, L. A., Schoener, E., Henry, R., et al. (2006). Interdisciplinary benefits in project MAINSTREAM: A promising health professions educational model to address global substance abuse. *Journal of Interprofessional Care, 20*(6), 655-655-664. Our purpose was to evaluate the interdisciplinary aspects of Project MAINSTREAM, a faculty development program that trained 39 competitively selected health professional tutors in substance abuse education. Mid-career faculty fellows (tutors) from 14 different health professions across the US dedicated 20% of their academic time for two years to Project MAINSTREAM. Teams of three fellows carried out curricular enhancement and service-learning field project requirements in mentored Interdisciplinary Faculty Learning Groups (IFLGs). Formative and summative evaluations were conducted via written questionnaires and confidential telephone interviews. The importance of interdisciplinary education was rated positively (mean of 3.57 on 1 - 5 scale). Using 18 parameters, fellows preferred interdisciplinary over single disciplinary teaching (means ranged from 3.40 - 4.86), and reported high levels of benefit from their interdisciplinary collaborations (means ranged from 3.53 - 4.56). Fellows reported that interdisciplinary educational collaborations were feasible (3.31) at their home institutions. The majority (63%) said that their trainees, colleagues, supervisors and institutions valued interdisciplinary training either "highly" or "somewhat", but 22% did not value it. The fellows identified scheduling conflicts (3.46), and lack of faculty rewards (3.46) such as pay or credit toward promotion, as two barriers that they encountered.

Martin-Rodriguez, L. S., Beaulieu, M. D., D'Amour, D., & Ferrada-Videla, M. (2005). The determinants of successful collaboration: A review of theoretical and empirical studies. *Journal of Interprofessional Care, 19*(Supplement 1), 132-132-147.

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.

Melin, A. L., Wieland, D., Harker, J. O., & Bygren, L. O. (1995). Health outcomes of post-hospital in-home team care: Secondary analysis of a swedish trial. *Journal of the American Geriatrics Society, 43*(3), 301-307.

This study was conducted to determine patient and treatment-related factors predictive of health outcomes. Hospital inpatients stable for discharge from acute care, having at least one chronic condition, and dependent in 1 to 5 Katz activities of daily life (ADLs) were randomized to "team" (n = 150) or "usual care" (n = 99). Team patients were eligible for in-home primary care by an interdisciplinary team that included a physician, physical therapist, and 24-hour nursing services and geriatric consultation where necessary. "Usual-care" patients received standard district nurse-administered services at home upon hospital discharge.

Rust, G., & Cooper, L. A. (2007). How can practice-based research contribute to the elimination of health disparities? *Journal of the American Board of Family Medicine : JABFM*, 20(2), 105-114. doi:10.3122/jabfm.2007.02.060131

Racial, ethnic, and socioeconomic disparities in health care and health outcomes are well documented. Disparities research is evolving from documenting these disparities, to understanding their causes and mechanisms, and finally to conducting interventional research to reduce or eliminate disparities. Unfortunately, few studies to date have demonstrated substantial reductions in health outcomes disparities. Traditional experimental models of research that test a single intervention held constant throughout the study period may not have the power to impact complex clusters of comorbid health disparities in patients who receive care in underresourced primary care safety net practice settings. New models of research will be required to test dynamic, multidimensional interventions that triangulate on patients, providers, and communities and are continuously improved with every radar-sweep of feedback from rapid-cycle measurement of population health outcomes on a community-wide basis. In this article, we review 12 promising strategies that could substantially increase the impact of research on eliminating health disparities in America.

Verma, S., Medves, J., Paterson, M., & Patteson, A. (2006). Demonstrating interprofessional education using a workshop model. *Journal of Interprofessional Care*, 20(6), 679-679-681.

In response to the Inter-professional Education for Collaborative Patient-Centred Practice program initiative by Health Canada, the authors developed a programme of education and research called the Queen's University Inter-professional Patient-Centred Education Direction (QUIPPED). The two-hour workshop described in this paper was an early outcome of the QUIPPED inter-professional education (IPE) approach to faculty development and was part of an international conference hosted by IECPCP in Canada, in May 2005.

Whitcomb, M. E. (2007). Preparing the personal physician for practice (P(4)): Meeting the needs of patients: Redesign of residency training in family medicine. *Journal of the American Board of Family Medicine : JABFM*, 20(4), 356-64; discussion 329-31. doi:10.3122/jabfm.2007.04.070100

Family medicine stands at a critical point in its history. To achieve a place of enhanced prominence within American medicine, the discipline must acknowledge the fundamental changes that have occurred in the country's health care system in recent decades and discard its historical attachment to the fundamental beliefs that led to the establishment of the specialty almost 40 years ago. If the discipline is to serve the most critical needs of the American public, family medicine residency programs must be redesigned to train family physicians who will be experts in the ambulatory care of patients with chronic disease. To accomplish this, family medicine residency programs should provide residents in training with a more concentrated experience in the care of such patients. The enhanced focus of training on education for chronic illness care can be accomplished within a 2-year training period by eliminating training requirements that are no longer relevant to the practice of family medicine in most communities.

Wilson, J., & Websdale, N. (2006). Domestic violence fatality review teams: An interprofessional model to reduce deaths. *Journal of Interprofessional Care*, 20(5), 535-535-544.

In an effort to reduce injuries and prevent deaths from violence, interprofessional domestic violence fatality review teams (DVFRT) have developed across the United States and globally to study factors

that contribute to intimate partner injury and deaths. Through interprofessional collective recommendations and cooperative actions, these teams are developing promising practices and systems' changes that offer better services, learning, and interventions to reduce injury and death from domestic violence.