TEAMWORK AND COLLABORATION

Annotated Bibliography

Apker, J., Propp, K. M., Ford, W. S. Z., & Hofmeister, N. (2006). Collaboration, credibility, compassion, and coordination: Professional nurse communication skill sets in health care team interactions. *Journal of professional nursing: Official journal of the American Association of Colleges of Nursing, 22*(3), 180-189.
This study explored how nurses communicate professionalism in interactions with members of their health care teams. Extant research shows that effective team communication is a vital aspect of a positive nursing practice environment, a setting that has been linked to enhanced patient outcomes. Although communication principles are emphasized in nursing education as an important component of professional nursing practice, actual nurse interaction skills in team-based health care delivery remain understudied. Qualitative analysis of interview transcripts with 50 participants at a large tertiary hospital revealed four communicative skill sets exemplified by nursing professionals: collaboration, credibility, compassion, and coordination. Study findings highlight specific communicative behaviors associated with each skill set that exemplify nurse professionalism to members of health care teams. Theoretical and pragmatic conclusions are drawn regarding the communicative responsibilities of professional nurses in health care teams. Specific interaction techniques that nurses could use in nurse-team communication are then offered for use in baccalaureate curriculum and organizational in-service education. (Source: PubMed)

Arford, P. H. (2005). Nurse-physician communication: An organizational accountability. *Nursing economic$, 23*(2), 72-7, 55.
Dysfunctional nurse-physician communication has been linked to medication errors, patient injuries, and patient deaths. The organization is accountable for providing a context that supports effective nurse-physician communication. Organizational strategies to create such a context are synthesized from the structural, human resource, political, and cultural frameworks of organizational

behavior. (Source: PubMed)

Bandali, K., Parker, K., Mummery, M., & Preece, M. (2008). Skills integration in a simulated and interprofessional environment: An innovative undergraduate applied health curriculum. *Journal of interprofessional care, 22*(2), 179-189.
The objective of our study was to propose an innovative applied health undergraduate curriculum model that uses simulation and interprofessional education to facilitate students' integration of both technical and "humanistic" core skills. The model incorporates assessment of student readiness for clinical education and readiness for professional practice in a collaborative, team-based, patient-centred environment. Improving the education of health care professionals is a critical contributor to ultimately improving patient care and outcomes. A review of the current models in health sciences education reveals a scarcity of clinical placements, concerns over students' preparedness for clinical education, and profession-specific delivery of health care education which fundamentally lacks collaboration and communication amongst professions. These educational shortcomings ultimately impact the delivery and efficacy of health care. Construct validation of clinical readiness will continue through primary research at The Michener Institute for Applied Health Sciences. As the new educational model is implemented, its impact will be assessed and documented using specific outcomes measurements. Appropriate modifications to the model will be made to ensure improvement and further applicability to an undergraduate medical curriculum. (Source: PubMed)

Barnsteiner, J. H., Disch, J. M., Hall, L., Mayer, D., & Moore, S. M. (2007). Promoting interprofessional education. *Nursing outlook, 55*(3), 144-150.
The work of the Institute of Medicine and others has clearly demonstrated that when healthcare professionals understand each others' roles and are able to communicate and work effectively together, patients are more likely to receive safe, quality care. Currently, there are few opportunities to bring faculty and students in pre-licensure programs from multiple disciplines together for the purpose of learning together about each others' roles, and practicing collaboration and teamwork. Designing and implementing interprofessional education offerings is challenging. Course scheduling, faculty interest and

expertise in interprofessional education (IPE), a culture of IPE among faculty and students, and institutional policies for sharing course credit among schools are just a few of the challenges. This article explores the concept of IPE, and how faculty in schools of nursing might take the lead to work with colleagues in other health profession schools to prepare graduates to understand each others' roles, and the importance of teamwork, communication, and collaboration to the delivery of high quality, safe patient care. (Source: PubMed)

Bender, D. G., & Buckner, S. K. (2005). Interdisciplinary patient care skills module. *The Journal of nursing education, 44*(6), 291-292.
The literature suggests that an interdisciplinary team model may offer the best opportunity for hospitals to decrease health care expenditures, while still maintaining high-quality patient care. An interdisciplinary approach coordinates care, so services are provided at a level that adequately addresses patient needs without wasting time and energy due to costly overlap of services. This results in the delivery of comprehensive, patient-centered care. This article describes an interdisciplinary module that involved entry-level nursing, physical therapist, and occupational therapist students. The module’s primary objective was to provide an opportunity for students to experience working together to meet a patient’s needs. Involving nursing, physical therapist, and occupational therapist students in a hands-on, interdisciplinary learning experience at the start of their educations achieved the secondary objective of emphasizing the value our programs place on teamwork in patient care. (Source: Publisher)

Bianchi-Sand, S. (2003). It takes a team to prevent errors. *The American journal of nursing, 103*(12), 89-90.
This article details the necessity of better communication among health care providers to mitigate medical errors. Programs such as crew resource management (CRM) training could promote teamwork and collaboration thus increasing the likelihood of preventing errors. (Source: QSEN Team)

Bradbury-Jones, C., Sambrook, S., & Irvine, F. (2007). The meaning of empowerment for nursing students: A critical incident study. *Journal of advanced nursing, 59*(4), 342-351.

AIM: This paper is a report of a study to explore the meaning of empowerment for nursing students in relation to their clinical practice experiences. BACKGROUND: Empowerment and power are well-researched areas of nursing practice, particularly in relation to Registered Nurses. Furthermore, several studies have considered the experiences of nursing students in terms of nursing culture and socialization. However, few researchers have focused specifically on nursing student empowerment. METHOD: The critical incident technique was used and anonymous data were collected between November 2005 and January 2006. One hundred and nine written critical incidents were provided by 66 nursing students relating to empowering and disempowering experiences in clinical practice. The data were content analysed. FINDINGS: Nursing students experience both empowerment and disempowerment in clinical placements, centering on three issues: learning in practice, team membership and power. Continuity of placement, the presence of a mentor and time underpinned empowering experiences whereas their absence had a disempowering effect. CONCLUSION: The consequences of nursing student empowerment are high self-esteem, motivation for learning and positive regard for placement. Supportive mentors play a pivotal role in the empowerment of nursing students and it is essential for the nursing profession that they are supported to undertake their mentorship role. (Source: PubMed)

Buerhaus, P. I., Donelan, K., Ulrich, B. T., Norman, L., DesRoches, C., & Dittus, R. (2007). Impact of the nurse shortage on hospital patient care: Comparative perspectives. *Health affairs, 26*(3), 853-862.
National surveys of registered nurses, physicians, and hospital executives document considerable concern about the U.S. nurse shortage. Substantial proportions of respondents perceived negative impacts on care processes, hospital capacity, nursing practice, and the Institute of Medicine's six aims for improving health care systems. There were also many areas of divergent opinion within and among these groups, including the impact of the shortage on safety and early detection of patient complications. These divergences in perceptions could be important barriers to resolving the current nurse shortage and improving the quality and safety of patient care. (Source: PubMed)

Burke, M., Boal, J., & Mitchell, R. (2004). A new look at the old. Communicating for better care: Improving nurse-physician communication. *American journal of nursing, 104*(12), 40-48.
Effective nurse--physician communication is essential to care, especially that of older adults, who often have comorbidities that can lead to frequent moves between care settings. This article examines the current state of nurse--physician communication and presents suggestions on how to improve it, including developing relationships, defining communication strategies, and packaging information for clarity. (Source: Publisher)

Cadell, S., Bosma, H., Johnston, M., Porterfield, P., Cline, L., Da Silva, J., et al. (2007). Practising interprofessional teamwork from the first day of class: a model for an interprofessional palliative care course. *Journal of palliative care, 23*(4), 273-279.
Providing care to the dying requires an interprofessional team to attend to complex needs that extend beyond the physical care of the patient. This article presents a model of education by describing an interprofessional palliative care course that brings together students from various health professions to provide an opportunity for learning and practice on a palliative care team. (Source: Publisher)

Caramanica, L., Cousino, J. A., & Petersen, S. (2003). Four elements of a successful quality program. Alignment, collaboration, evidence-based practice, and excellence. *Nursing administration quarterly, 27*(4), 336-343.
The nurse's role in quality improvement and assurance is well established, but this is particularly true as hospitals engage in a culture of patient safety and view quality-related activities as important "safety checks." The role of the nurse in ensuring quality related to patient care and safety cannot be overstated. The achievement of quality and safety in patient care is the result of caregivers doing the right thing the right way the first time. Nurses serve as a critical link to the best quality health care organizations have to offer. This article describes four elements of a successful quality program in a large tertiary health care setting (alignment, collaboration, evidence-based practice, and excellence) and makes the connection between quality and safety in the provision of exemplary patient

care. Three examples are provided that show how nurses and other members of the health care team grouped together as a governing council for quality (Performance Improvement Council) and at the bedside as direct caregivers in ensuring patient safety and quality patient care. (Source: PubMed)

Christie, C., Smith, A.,Jr., & Bednarzyk, M. (2007). Transdisciplinary assignments in graduate health education as a model for future collaboration. *Journal of allied health, 36*(2), 67-71.
Transdisciplinary health care continues to be at the forefront of patient treatment in the medical arena, in part due to escalating health care costs, an increasing aging population, and the development of multiple chronic diseases. Gaining the knowledge, experience, and principles associated with transdisciplinary teamwork to successfully prepare for modern-day practice is therefore essential for individuals of various health care professions. This report describes an assignment developed and implemented to facilitate professional interaction between graduate physical therapy, nutrition, and nursing students. The objectives of this assignment were to determine through student evaluation the effects of a transdisciplinary experience on students' understanding of the role of another discipline and students' communication skills across disciplines. When evaluating the assignment, students most often remarked that they developed a greater understanding of the roles of the included disciplines and reported a significant increase in communication skills. However, some students did not concur that this assignment was effective due to the scheduling conflicts and lack of teamwork that can occur during a collaborative project. The students' reports of their experiences in completing the assignment provide valuable insights for implementing and/or updating a preparatory transdisciplinary education component in other settings. Additional research can focus on the challenges faced by the majority of the students venturing into actual health care or "real-world" settings for comparative studies. (Source: Publisher)

Constantino, R. E. (2007). A transdisciplinary team acting on evidence through analyses of moot malpractice cases. *Dimensions of critical care nursing: DCCN, 26*(4), 150-155.
A transdiciplinary team is crucial for healthcare systems to act based on evidence

in responding to the global demand of the business of caring and patient safety. The purpose of this paper is to outline a transdisciplinary team led by nurses that examines linkages between moot malpractice cases filed against a healthcare system and to the quality of the healthcare system's ecology, caregiver, and patient safety outcomes. (Source: PubMed)

Cronenwett, L., Sherwood, G., Barnsteiner, J., Disch, J., Johnson, J., Mitchell, P., et al. (2007). Quality and safety education for nurses. *Nursing outlook, 55*(3), 122-131.
Quality and Safety Education for Nurses (QSEN) addresses the challenge of preparing nurses with the competencies necessary to continuously improve the quality and safety of the health care systems in which they work. The QSEN faculty members adapted the Institute of Medicine competencies for nursing (patient-centered care, teamwork and collaboration, evidence-based practice, quality improvement, safety, and informatics), proposing definitions that could describe essential features of what it means to be a competent and respected nurse. Using the competency definitions, the authors propose statements of the knowledge, skills, and attitudes (KSAs) for each competency that should be developed during pre-licensure nursing education. Quality and Safety Education for Nurses (QSEN) faculty and advisory board members invite the profession to comment on the competencies and their definitions and on whether the KSAs for pre-licensure education are appropriate goals for students preparing for basic practice as a registered nurse. (Source: PubMed)

Curran, V. R., Sharpe, D., & Forristall, J. (2007). Attitudes of health sciences faculty members towards interprofessional teamwork and education. *Medical education, 41*(9), 892-896.
Objectives Faculty attitudes are believed to be a barrier to successful implementation of interprofessional education (IPE) initiatives within academic health sciences settings. The purpose of this study was to examine specific attributes of faculty members, which might relate to attitudes towards IPE and interprofessional teamwork. Methods A survey was distributed to all faculty members in the medicine, nursing, pharmacy and social work programmes at our institution. Respondents were asked to rate their attitudes towards

interprofessional health care teams, IPE and interprofessional learning in an academic setting using scales adopted from the peer-reviewed literature. Information on the characteristics of the respondents was also collected, including data on gender, prior experience with IPE, age and years of practice experience. Results A total response rate of 63.0% was achieved. Medicine faculty members reported significantly lower mean scores ($P < 0.05$) than nursing faculty on attitudes towards IPE, interprofessional teams and interprofessional learning in the academic setting. Female faculty and faculty who reported prior experience in IPE reported significantly higher mean scores ($P < 0.05$). Neither age, years of practice experience nor experience as a health professional educator appeared to be related to overall attitudinal responses towards IPE or interprofessional teamwork. Conclusions The findings have implications for both the advancement of IPE within academic institutions and strategies to promote faculty development initiatives. In terms of IPE evaluation, the findings also highlight the importance of measuring baseline attitudinal constructs as part of systematic evaluative activities when introducing new IPE initiatives within academic settings. (Source: PubMed)

Daley, L. K., Menke, E., Kirkpatrick, B., & Sheets, D. (2008). Partners in practice: a win-win model for clinical education. *Journal of nursing education, 47*(1), 30-32. A program of cognitive apprenticeship focusing on problem solving skills through reflection, discussion, and actions shared between novice and experienced students was developed and piloted in a large baccalaureate nursing program in the midwestern United States. The program paired senior students in a leadership course with instructor-led groups of first-year students in the clinical and laboratory setting. Senior students developed leadership skills associated with best practices including preparation, planning, clear communication, feedback, and change, while gaining a better appreciation of individual learning needs. First-year students gained confidence with their knowledge and skills and were able to refine communications with patients, patients' families, and staff members and think more critically about patient care issues. Unanticipated benefits included patient, family, and staff recognition and appreciation for a new model for patient care delivery. (Source: PubMed)

D'Amour, D., Ferrada-Videla, M., Rodriguez, L. S. M., & Beaulieu, M. (2005). The conceptual basis for interprofessional collaboration: Core concepts and theoretical frameworks. *Journal of interprofessional care, 19*, 116-131.
Interprofessional collaboration is a key factor in initiatives designed to increase the effectiveness of health services currently offered to the public. It is important that the concept of collaboration be well understood, because although the increasingly complex health problems faced by health professionals are creating more interdependencies among them, we still have limited knowledge of the complexity of interprofessional relationships. The goal of this literature review was to identify conceptual frameworks that could improve our understanding of this important aspect of health organizations. To this end, we have identified and taken into consideration: (A) the various definitions proposed in the literature and the various concepts associated with collaboration, and (B) the various theoretical frameworks of collaboration. Our results demonstrate that: (1) the concept of collaboration is commonly defined through five underlying concepts: sharing, partnership, power, interdependency and process; (2) the most complete models of collaboration seem to be those based on a strong theoretical background, either in organizational theory or in organizational sociology and on empirical data; (3) there is a significant amount of diversity in the way the various authors conceptualized collaboration and in the factors influencing collaboration; (4) these frameworks do not establish clear links between the elements in the models and the outputs; and (5) the literature does not provide a serious attempt to determine how patients could be integrated into the health care team, despite the fact that patients are recognized as the ultimate justification for providing collaborative care. (Source: PubMed)

Day, L., & Smith, E. L. (2007). Integrating quality and safety content into clinical teaching in the acute care setting. *Nursing outlook, 55*(3), 138-143.
Teaching the highest quality and safest practice has long been a goal of faculty members in pre-licensure nursing education programs. This article will describe innovative approaches to integrating quality and safety content into existing clinical practica. The core competencies identified by the Quality and Safety Education for Nurses project-patient-centered care, teamwork and collaboration,

evidence-based practice, quality improvement, safety, and informatics-serve as the framework for the teaching/learning exercises. The strategies described require a shift in attention rather than changes in course content and can be included in any clinical rotation in an acute care setting. (Source: PubMed)

Dayton, E., & Henriksen, K. (2007). Communication failure: Basic components, contributing factors, and the call for structure. *Joint Commission journal on quality and patient safety, 33*(1), 34-47.
BACKGROUND: Communication is a taken-for-granted human activity that is recognized as important once it has failed. Communication failures are a major contributor to adverse events in health care. BASIC COMMUNICATION COMPONENTS AND PROCESSES: The components and processes of communication converge in an intricate manner, creating opportunities for misunderstanding along the way. When a patient's safety is at risk, providers should speak up (that is, initiate a message) to draw attention to the situation before harm is caused. They should also clearly explain (encode) and understand (decode) each other's diagnosis and recommendations to ensure well coordinated delivery of care. INDIVIDUAL, GROUP, AND ORGANIZATIONAL FACTORS: Beyond basic dyadic communication exchanges, an intricate web of individual, group, and organizational factors--more specifically, cognitive workload, implicit assumptions, authority gradients, diffusion of responsibility, and transitions of care--complicate communication. THE CALL FOR STRUCTURE: More structured and explicitly designed forms of communication have been recommended to reduce ambiguity, enhance clarity, and send an unequivocal signal, when needed, that a different action is required. Read-backs, Situation-Background-Assessment-Recommendation, critical assertions, briefings, and debriefings are seeing increasing use in health care. CODA: Although structured forms of communication have good potential to enhance clarity, they are not fail-safe. Providers need to be sensitive to unexpected consequences regarding their use. (Source: PubMed)

DiMeglio, K., Padula, C., Piatek, C., Korber, S., Barrett, A., & Ducharme, M., et al. (2005). Group cohesion and nurse satisfaction: Examination of a team-building approach. *The Journal of nursing administration, 35*(3), 110-120.

OBJECTIVES: The purpose of this study was to determine the impact of a team-building intervention on group cohesion, nurse satisfaction, and turnover rates. BACKGROUND: Creating an environment that supports and retains nurses represents a formidable challenge for nursing leaders. Research related to strategies that positively impact the culture in which nurses practice, thus potentially improving nurse satisfaction and reducing turnover, is critically needed. METHODS: Registered nurses (RNs) employed on inpatient units in a 247-bed, private acute care Magnet teaching hospital participated in this quasi experimental preintervention and postintervention design. The RN-RN interaction subscale from the National Database of Nursing Quality Indicators Adapted Index of Work Satisfaction, the National Database of Nursing Quality Indicators Adapted Index of Job Enjoyment, the Group Cohesion Scale, and a facilitator-developed measure were completed preimplementation and postimplementation of unit-tailored intervention strategies, which took place over a 12-month period. Turnover rates were collected 6 month preintervention and postintervention. RESULTS: Improvement in group cohesion, RN-RN interaction, job enjoyment, and turnover was demonstrated. CONCLUSION: Targeted, unit-based strategies can be an effective means of reducing turnover rates and improving group cohesion and nurse satisfaction. (Source: PubMed)

Fewster-Thuente, L., & Velsor-Friedrich, B. (2008). Interdisciplinary collaboration for healthcare professionals. *Nursing administration quarterly, 32*(1), 40-48. Interdisciplinary collaboration has the capacity to affect both healthcare providers and patients. Research has shown that the lack of communication and collaboration may be responsible for as much as 70% of the adverse events currently reported. The purpose of this article is 2-fold: to examine factors that may influence interdisciplinary collaboration and consequently patient outcomes and to examine the relationship between interdisciplinary collaboration and King's theory of goal attainment as a theory to support the phenomenon of interdisciplinary collaboration. (Source: PubMed)

Finkelman, A. W., & Kenner, C. (2007). *Teaching IOM: Implications of the Institute of Medicine reports for nursing education*. Silver Spring, MD: American Nurses Association.

Teaching IOM focuses on the core competencies derived from the IOM reports on quality and health care and how to use these reports in the classroom. The companion CD-ROM provides additional material for incorporating content into curricula and teaching-learning experiences. It includes PowerPoint presentations with notes on the book's five major topics; healthcare safety, healthcare quality, public health safety and quality, healthcare diversity, and linkage between research and evidence-based practice. The content is appropriate for graduate or undergraduate students. (Source: QSEN Team)

Firth-Cozens, J. (2001). Cultures for improving patient safety through learning: The role of teamwork. *Quality in health care: QHC,* 10 Suppl 2, ii26-31. Improvements in patient safety result primarily from organisational and individual learning. This paper discusses the learning that can take place within organisations and the cultural change necessary to encourage it. It focuses on teams and team leaders as potentially powerful forces for bringing about the management of patient safety and better quality of care. (Source: PubMed)

Gardner, D. B. (2005). Ten lessons in collaboration. *Online journal of issues in nursing, 10*(1), 15p. From http://www.nursingworld.org/ojin/topic26/tpc26_1.htm Collaboration is a substantive idea repeatedly discussed in health care circles. The benefits are well validated. Yet collaboration is seldom practiced. So what is the problem? The lack of a shared definition is one barrier. Additionally, the complexity of collaboration and the skills required to facilitate the process are formidable. Much of the literature on collaboration describes what it should look like as an outcome, but little is written describing how to approach the developmental process of collaboration. In an attempt to remedy the all too familiar riddle of matching ends with means, this article offers key lessons to bridge the discourse on collaboration with the practice of collaboration. These lessons can benefit clinical nurse managers and all nurses who operate in an organizational setting that requires complex problem solving. (Source: PubMed)

Gassert, C. A., Peay, W. J., & Mitchell, J. A. (2006). A model of interprofessional informatics education. *Studies in health technology and informatics, 122*, 149-152.

An emphasis on patient safety and an administrative mandate to have information systems in place in most health care agencies in the USA by 2014 has put pressure on nursing informatics programs to increase the number of graduates. At the same time a need for change in health professions education was emphasized at an educational summit sponsored by the Institute of Medicine. Interprofessional education (IPE) will help to provide needed educational reform in informatics and is defined as planned occasions when two or more professions learn from each other and about each other in a structured manner. This paper discusses an evolving interprofessional (IPE) model of informatics education that has been developed at the University of Utah. Because of interprofessional collaboration, faculty, students, and support staff from both the medical and nursing informatics programs moved into a suite on the fifth floor of a state-of-art technology-rich health sciences education building. The co-located space has enabled the informatics programs to increase activities that promote interprofessional education. (Source: PubMed)

Gerardi, D., & Fontaine, D. K. (2007 Jan-Mar). Creating a healthy workplace. True collaboration: Envisioning new ways of working together. *AACN Advanced critical care, 18*(1), 10-14.
The American Association of Critical-Care Nurses released its Standards for Establishing and Sustaining Healthy Work Environments in 2005. Through literature review and focus groups, 6 key components emerged as essential for the creation of a healthy work environment. True collaboration, one of the six, is the focus of this article. (Source: Publisher)

Greiner, A. C., Knebel, E., & Institute of Medicine Committee on the Health Professions Education Summitt (Eds.). (2003). *Health professions education: A bridge to quality*. Washington, D.C.: National Academies Press.
On June 17-18, 2002, over 150 leaders and experts from health professions education, regulation, policy, advocacy, quality, and industry attended the Health Professions Education Summit to discuss and help the committee develop strategies for restructuring clinical education to be consistent with the principles of the 21st-century health system. The report says that doctors, nurses, pharmacists and other health professionals are not being adequately prepared to

provide the highest quality and safest medical care possible, and there is insufficient assessment of their ongoing proficiency. Educators and accreditation, licensing and certification organizations should ensure that students and working professionals develop and maintain proficiency in five core areas: delivering patient-centered care, working as part of interdisciplinary teams, practicing evidence-based medicine, focusing on quality improvement and using information technology. (Source: Publisher)

Haig, K. M., Sutton, S., & Whittington, J. (2006). SBAR: A shared mental model for improving communication between clinicians. *Joint Commission journal on quality and patient safety, 32*(3), 167-175.
BACKGROUND: The importance of sharing a common mental model in communication prompted efforts to spread the use of the SBAR (Situation, Background, Assessment, and Recommendation) tool at OSF St. Joseph Medical Center, Bloomington, Illinois. CASE STUDY: An elderly patient was on warfarin sodium (Coumadin) 2.5 mg daily. The nurse received a call from the lab regarding an elevated international normalized ratio (INR) but did not write down the results (she was providing care to another patient). On the basis of the previous lab cumulative summary, the physician increased the warfarin dose for the patient; a dangerously high INR resulted. ACTIONS TAKEN: The medical center initiated a collaborative to implement the use of the SBAR communication tool. Education was incorporated into team resource management training and general orientation. Tools included SBAR pocket cards for clinicians and laminated SBAR "cheat sheets" posted at each phone. SBAR became the communication methodology from leadership to the microsystem in all forms of reporting. DISCUSSION: Staff adapted quickly to the use of SBAR, although hesitancy was noted in providing the "recommendation" to physicians. Medical staff were encouraged to listen for the SBAR components and encourage staff to share their recommendation if not initially provided. (Source: PubMed)

Hall, P. (2005). Interprofessional teamwork: Professional cultures as barriers. *Journal of interprofessional care, 19*, 188-196.
Each health care profession has a different culture which includes values, beliefs, attitudes, customs and behaviours. Professional cultures evolved as the different

professions developed, reflecting historic factors, as well as social class and gender issues. Educational experiences and the socialization process that occur during the training of each health professional reinforce the common values, problem-solving approaches and language/jargon of each profession. Increasing specialization has lead to even further immersion of the learners into the knowledge and culture of their own professional group. These professional cultures contribute to the challenges of effective 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. (Source: PubMed)

Hamilton, P., Gemeinhardt, G., Mancuso, P., Sahlin, C. L., & Ivy, L. (2006). SBAR and nurse-physician communication: Pilot testing an educational intervention... situation, background, assessment, and recommendation. *Nursing administration quarterly, 30*(3), 295-299.
Poor communication in hospitals leads to medical errors and adverse events, which can jeopardize patient safety and threaten nurse retention. SBAR was introduced in 2004 as a tool to improve communication primarily between nurses and physicians in hospitals. SBAR stands for Situation, Background, Assessment, and Recommendation and is a helpful framework for organizing information that must be communicated rapidly and concisely. In less than 2 years, SBAR has entered healthcare vernacular and is now considered "best practice" for use in rapid transmission of information in hospitals. However, there is very little evidence as to the effect of SBAR on quality of communication between nurses and physicians and even less evidence of its impact on patient outcomes. SBAR is typically introduced in hospitals using some form of classroom training. The study described here was a pilot test to assess the effect of classroom-only SBAR training and to lay the foundation for a subsequent full-scale test of SBAR's efficacy and effectiveness. (Source: Publisher)

Hammond, K., Bandak, A., & Williams, M. (1999). Nurse, physician, and consumer role responsibility perceived by health care providers. *Holistic nursing practice, 13*(2), 28-37.

The article describes a study that addressed perceptions of unilateral and egalitarian role functions for nurses, physicians, and consumers in a long-term, 345-bed psychiatric facility in the western United States. Findings indicated that physicians desired to retain authority for health care decisions and that nurses, social workers, and hospital administrators preferred collaborative practice. Support for shared responsibility increased among psychiatric technicians with years of experience. Experience did not alter the attitudes of physicians, occupational therapists, and recreational therapists for physician dominance. With experience, nurses increased their belief in nurse responsibility. Despite evidence for collaborative decision making, results of this study indicate that attitudes of health care providers may prevent this tenet from being actualized. (Source: PubMed)

Holden, J. (2006). How can we improve the nursing work environment? *MCN. The American journal of maternal and child nursing, 31*(1), 34-38.
It has been suggested by many recently that the nursing work environment needs to be altered to make it more responsive to both nurse and patient needs. One essential aspect of this change would be to increase patient safety. This article suggests that to improve patient safety as well as satisfaction of nurses, the culture of the nursing organization should be transformed into one of a "learning organization." Using this model of an organization, every member of the nursing organization would be encouraged to reach his or her greatest potential, the welfare of the team would become paramount, and a shared vision of where the organization needs to go would emerge, thus maximizing productivity, safety, and job satisfaction for all healthcare team members. This transformation could mean that the terms "Nursing Organizations" and "Learning Organizations" would not have to be oxymorons. (Source: PubMed)

Hylin, U., Nyholm, H., Mattiasson, A. C., & Ponzer, S. (2007). Interprofessional training in clinical practice on a training ward for healthcare students: A two-year follow-up. *Journal of interprofessional care, 21*(3), 277-288.
This follow-up study describes the former students' lasting impressions of a two-week interprofessional course on a training ward aimed at enhancing the understanding of the roles of other professions and the importance of

communication for teamwork and for patient care as well as providing an opportunity for profession-specific training. A questionnaire with both closed and open-ended questions was sent to 633 former students two years after the course and 348 (55%) responded. The course was rated as very good and most of the former students had lasting and positive impressions. Ninety-two percent of respondents encouraged teamwork in their present work and 90% wanted to retain the course. The qualitative analysis of the open-ended questions resulted in five categories describing students' perceptions: professional role development, working in teams, tutoring, patient care and future aspects of the course and real world practice. Our results suggest that interprofessional training during undergraduate education provides lasting impressions that may promote teamwork in students' future occupational life. (Source: PubMed)

Ironside, P. M. (2005). Working together, creating excellence: The experiences of nursing teachers, students, and clinicians. *Nursing education perspectives, 26*(2), 78-85.
This study, conducted to inform the development and implementation of the National League for Nursing Centers of Excellence in Nursing Education Program, provides a hermeneutical analysis of the common experiences and shared meanings of excellence as described by nursing students, teachers, and clinicians. Findings highlight how excellence resides in students and teachers working and learning together through enacting new pedagogies. Two themes are reported: "Working Together: Creating New Partnerships Between and Among Teachers and Students" and "Learning Together: Creating Excellence and Shaping the Future of Nursing Education Through Enacting New Pedagogies". (Source: PubMed)

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: Journal of the Association of American Medical Colleges, 81*(3), 252-256.
The authors describe the development and impact of CLARION, a student-run organization at the University of Minnesota founded in 2001 and dedicated to furthering interprofessional education for health professions students. CLARION's

student founders recognized that three recent reports from the Institute of Medicine will fuel significant changes in health professions education. Moreover, they deduced that targeted, interprofessional education in the preclinical years could provide fundamental skills and understanding needed to make today's patient care safer and more effective. By engaging health care professionals and faculty, CLARION creates and conducts extracurricular, interprofessional experiences for students that are reflective of the six IOM aims for health care. Student members are from four separate schools of the university's academic health center: medicine, nursing, pharmacy, and public health. The organization's capstone event, the Interprofessional Case Competition, challenges interprofessional teams of students to compete in conducting and presenting a root cause analysis of a fictitious sentinel event. The interprofessional organizational structure of the CLARION board models the kind of interprofessional equality needed to effectively solve problems in the health care system. The interaction among students from different health professions has led them to many new understandings about health care and the realization that many fundamental biases about other professions are firmly rooted in students before they enter the workplace. CLARION has enabled continued professional development of students, faculty, and practitioners, leading individual students to enhanced understanding of the health care system. It is a grassroots catalyst that has prompted faculty to reexamine traditional health professions curricula and look for ways to integrate more interprofessional opportunities into it. (Source: PubMed)

Joint Commission on the Accreditation of Healthcare Organizations. (2007). *Front line of defense: the role of nurses in preventing sentinel events* (2nd ed.). Oakbrook Terrace, IL: Joint Commission on the Accreditation of Healthcare Organizations.
Written especially for nurses in all disciplines and health care settings, this book focuses on the hands-on role nurses play in the delivery of care and their unique opportunity and responsibility to identify potential sentinel events. Topics include preventing medication and transfusion errors, as well as preventing suicide, falls, and treatment delays. New chapters address wrong-site surgery perinatal injuries

or death, and injuries or death due to criminal events. Learn how to: better recognize the root causes of specific sentinel events; identify strategies to prevent sentinel events from occurring; and overcome obstacles in the areas of staffing, training, culture of safety, and communication among the health care team. (Source: Publisher)

Kaissi, A., Johnson, T., & Kirschbaum, M. S. (2003). Measuring teamwork and patient safety attitudes of high-risk areas. *Nursing economic$, 21*(5), 211-8, 207.
Patient care leaders recognize that substantial reductions in health care errors will not come until more attention is given to human solutions, such as improving teamwork in health care teams. The authors introduce a short, valid, and reliable instrument to measure teamwork and patient safety attitudes in hospital high-risk areas, namely the emergency department, the operating room, and the intensive care unit. The instrument was tested among nurses in four hospitals and the results showed that the nurses favored the team approach, while recognizing that teamwork in their departments is not very advanced and that communication with some key team members is problematic. This situation seems ideal for the design of a team training intervention in these settings. (Source: PubMed)

Kalisch, B. J., Curley, M., & Stefanov, S. (2007). An intervention to enhance nursing staff teamwork and engagement. *Journal of nursing administration, 37*(2), 77-84.
Numerous studies have concluded that work group teamwork leads to higher staff job satisfaction, increased patient safety, improved quality of care, and greater patient satisfaction. Although there have been studies on the impact of multidisciplinary teamwork in healthcare, the teamwork among nursing staff on a patient care unit has received very little attention from researchers. In this study, an intervention to enhance teamwork and staff engagement was tested on a medical unit in an acute care hospital. The results showed that the intervention resulted in a significantly lower patient fall rate, staff ratings of improved teamwork on the unit, and lower staff turnover and vacancy rates. Patient satisfaction ratings approached, but did not reach, statistical significance. (Source: PubMed)

Kvarnström, S. (2008). Difficulties in collaboration: A critical incident study of interprofessional healthcare teamwork. *Journal of interprofessional care, 22*(2), 191-203.
The challenge for members of interprofessional teams is to manage the team processes that occur in all teamwork while simultaneously managing their individual professional identities. The aim of this study was to identify and describe difficulties perceived by health professionals in interprofessional teamwork. Utterances on verbal actions and resolutions were also explored to enable a discussion of the implications for interprofessional learning. Individual interviews using a Critical Incident Technique were performed with 18 Swedish professionals working in healthcare teams, and examined with qualitative content analysis. The main findings show difficulties related to the team dynamic that arose when team members acted towards one another as representatives of their professions, difficulties that occurred when the members' various knowledge contributions interacted in the team, and difficulties related to the influence of the surrounding organization. The perceived consequences of the difficulties, beyond individual consequences, were restrictions on the use of collaborative resources to arrive at a holistic view of the patient's problem, and barriers to providing patient care and service in the desired manner. This paper also discusses how experiences of managing difficulties entailed various forms of interprofessional learning situations. (Source: PubMed)

Kyrkjebo, J. M., Brattebo, G., & Smith-Strom, H. (2006). Improving patient safety by using interprofessional simulation training in health professional education. *Journal of interprofessional care, 20*(5), 507-516.
Modern medicine is complex. Reports and surveys demonstrate that patient safety is a major problem. Health educators focus on professional knowledge and less on how to improve patient care and safety. The ability to act as part of a team, fostering communication, co-operation and leadership is seldom found in health education. This paper reports the findings from pilot testing a simulated training program in interprofessional student teams. Four teams each comprising one medical, nursing, and intensive nursing student (n = 12), were exposed to two simulation scenarios twice. Focus groups were used to evaluate the program.

The findings suggest that the students were satisfied with the program, but some of the videos and simulation exercises could be more realistic and more in accordance with each other. Generally they wanted more interprofessional team training, and had learned a lot about their own team performance, personal reactions and lack of certain competencies. Involving students in interprofessional team training seem to be more likely to enhance their learning process. The students' struggles with roles, competence and team skills underline the need for more focus on combining professional knowledge learning with team training. (Source: PubMed)

Kyrkjebo, J. M., & Hage, I. (2005). What we know and what they do: Nursing students' experiences of improvement knowledge in clinical practice. *Nurse education today, 25*(3), 167-175.
Nations around the world face mounting problems in health care, including rising costs, challenges to accessing services, and wide variations in safety and quality. Several reports and surveys have clearly demonstrated that adverse events and errors pose serious threats to patient safety. It has become obvious that future health professionals will need to address such problems in the quality of patient care. This article discuss a research study examining improvement knowledge in clinical practice as experienced by nursing students with respect to a patient-centred perspective, knowledge of health-care processes, the handling of adverse events, cross-professional collaboration, and the development of new knowledge. Six focus groups were conducted, comprising a total of 27 second-year students. The resulting discourses were recorded, coded and analysed. The findings indicate a deficiency in improvement knowledge in clinical practice, and a gap between what students learn about patient care and what they observe. In addition the findings suggest that there is a need to change the culture in health care and health professional education, and to develop learning models that encourage reflection, openness, and scrutiny of underlying individual and organizational values and assumptions in health care. (Source: PubMed)

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*, 497-505.

Most health professionals in training, as well as those in practice, lack the knowledge and skills they need to play an effective role in systems improvement. Until very recently, these competencies were not included in formal (or informal) educational curricula. Interprofessional collaboration - another core competency needed for successful systems improvement - is also inadequately taught and learned. Achieving Competence Today (ACT) was designed as a new model for interprofessional education for quality, safety and health systems improvement. The core of ACT is a four-module active learning course during which learners from different disciplines work together to develop a Quality Improvement Project to address a quality or safety problem in their own practice system. In this paper we describe the ACT program and curriculum model, discuss our strategies for maximizing ACT's interprofessional potential, and make recommendations for the future. (Source: PubMed)

Larson, E. (1999). The impact of physician-nurse interaction on patient care. *Holistic nursing practice, 13*(2), 38-46.
The perceptions of physicians and nurses vary in a number of respects, including the extent to which collaboration and joint decision making are valued, the definition of what constitutes adequate and appropriate interprofessional communication, the quality of nurse-physician interactions, and the understanding of respective areas of responsibility as well as patient goals. Reasons for these differences have been attributed to gender, historical origins of the two professions, and disparities between physicians and nurses with regard to socioeconomic status, education, and socialization. Failure of physicians and nurses to interact in a coordinated and positive fashion results in unhealthy work environments and poor patient outcomes. Both professions must examine their will to improve interprofessional interactions. (Source: PubMed)

Lefebvre, H., Pelchat, D., & Levert, M. J. (2007). Interdisciplinary family intervention program: a partnership among health professionals, traumatic brain injury patients, and caregiving relatives. *Journal of trauma nursing: The official journal of the Society of Trauma Nurses, 14*(2), 100-113.
Throughout the delivery of care after traumatic brain injury, the type of relationship that develops between the family and the professionals has a major

effect on the day-by-day adjustment of traumatic brain injury individuals and their relatives. Seventeen health professionals from different disciplines working with the traumatic brain injury clientele at different stages of the continuum of trauma care underwent training in the form of e-learning to apply the Interdisciplinary Family Intervention Program, or PRIFAM. The study methodology was mixed: participants' evaluation of the PRIFAM training was assessed through a quantitative questionnaire, whereas their experience and learning were documented in semiguided, qualitative interviews conducted before and after training. The results show that the training stimulated personal and professional reflective thought in participants and fostered the forging of an interdisciplinary partnership. The training had a positive impact on communication between professionals and with the families and helped to develop a sense of self-efficacy among health professionals. (Source: PubMed)

Leonard, M., Graham, S., & Bonacum, D. (2004). The human factor: The critical importance of effective teamwork and communication in providing safe care. *Quality & safety in health care, 13*, i85-90.
Effective communication and teamwork is essential for the delivery of high quality, safe patient care. Communication failures are an extremely common cause of inadvertent patient harm. The complexity of medical care, coupled with the inherent limitations of human performance, make it critically important that clinicians have standardised communication tools, create an environment in which individuals can speak up and express concerns, and share common "critical language" to alert team members to unsafe situations. All too frequently, effective communication is situation or personality dependent. Other high reliability domains, such as commercial aviation, have shown that the adoption of standardised tools and behaviours is a very effective strategy in enhancing teamwork and reducing risk. We describe our ongoing patient safety implementation using this approach within Kaiser Permanente, a non-profit American healthcare system providing care for 8.3 million patients. We describe specific clinical experience in the application of surgical briefings, properties of high reliability perinatal care, the value of critical event training and simulation, and benefits of a standardised communication process in the care of patients

transferred from hospitals to skilled nursing facilities. Additionally, lessons learned as to effective techniques in achieving cultural change, evidence of improving the quality of the work environment, practice transfer strategies, critical success factors, and the evolving methods of demonstrating the benefit of such work are described. (Source: PubMed)

Lidskog, M., Lofmark, A., & Ahlstrom, G. (2007). Interprofessional education on a training ward for older people: Students' conceptions of nurses, occupational therapists and social workers. *Journal of interprofessional care, 21*(4), 387-399.
Collaboration between professionals in health and social care is essential to meet the needs of the patient. The collaboration is dependent on knowledge and understanding of each other's roles. One means of improving communication and collaboration among professionals is interprofessional education. The aim of this study was to describe the variation in how students in nursing, occupational therapy and social work perceived their own and the other professions. Over a three-week period two interviews were conducted with each of 16 students who were on an interprofessional training ward for older people in a municipal setting in Sweden. A phenomenographical approach was used in the analysis of the interviews. The findings showed great variation in how the students perceived the professions, from simplistic in terms of tasks to a more complex conception in terms of knowledge, responsibility and values. Differences in the ways professions were described concerning their professional stance towards the patients were especially accentuated. The findings indicate that the students need opportunities for reflection on and scrutiny of each other's beliefs and knowledge. The influence of interprofessional education involving reflection on the different health-care professions needs to be explored in future research. (Source: PubMed)

Lindeke, L. L., & Sieckert, A. M. (2005). Nurse-physician workplace collaboration. *Online journal of issues in nursing, 10*(1), 11p.
Maximizing nurse-physician collaboration holds promise for improving patient care and creating satisfying work roles. The purpose of this article is to describe strategies that will facilitate effective nurse-physician collaboration. First the nature and the benefits of collaborative communication will be reviewed. This

review will be followed by a discussion of self-development, team-development, and communication-development strategies that can enhance nurse-physician collaboration. (Source: Publisher)

Lingard, L., Espin, S., Rubin, B., Whyte, S., Colmenares, M., & Baker, G. R., et al. (2005). Getting teams to talk: Development and pilot implementation of a checklist to promote interprofessional communication in the OR. *Quality & safety in health care, 14*(5), 340-346.

BACKGROUND: Pilot studies of complex interventions such as a team checklist are an essential precursor to evaluating how these interventions affect quality and safety of care. We conducted a pilot implementation of a preoperative team communication checklist. The objectives of the study were to assess the feasibility of the checklist (that is, team members' willingness and ability to incorporate it into their work processes); to describe how the checklist tool was used by operating room (OR) teams; and to describe perceived functions of the checklist discussions. METHODS: A checklist prototype was developed and OR team members were asked to implement it before 18 surgical procedures. A research assistant was present to prompt the participants, if necessary, to initiate each checklist discussion. Trained observers recorded ethnographic field notes and 11 brief feedback interviews were conducted. Observation and interview data were analyzed for trends. RESULTS: The checklist was implemented by the OR team in all 18 study cases. The rate of team participation was 100% (33 vascular surgery team members). The checklist discussions lasted 1-6 minutes (mean 3.5) and most commonly took place in the OR before the patient's arrival. Perceived functions of the checklist discussions included provision of detailed case related information, confirmation of details, articulation of concerns or ambiguities, team building, education, and decision making. Participants consistently valued the checklist discussions. The most significant barrier to undertaking the team checklist was variability in team members' preoperative workflow patterns, which sometimes presented a challenge to bringing the entire team together. CONCLUSIONS: The preoperative team checklist shows promise as a feasible and efficient tool that promotes information exchange and team cohesion. Further research is needed to determine the sustainability and generalizability of the

checklist intervention, to fully integrate the checklist routine into workflow patterns, and to measure its impact on patient safety. (Source: PubMed)

Lingard, L., Espin, S., Whyte, S., Regehr, G., Baker, G. R., & Reznick, R., et al. (2004). Communication failures in the operating room: An observational classification of recurrent types and effects. *Quality & safety in health care, 13*(5), 330-334.
BACKGROUND: Ineffective team communication is frequently at the root of medical error. The objective of this study was to describe the characteristics of communication failures in the operating room (OR) and to classify their effects. This study was part of a larger project to develop a team checklist to improve communication in the OR. METHODS: Trained observers recorded 90 hours of observation during 48 surgical procedures. Ninety four team members participated from anesthesia (16 staff, 6 fellows, 3 residents), surgery (14 staff, 8 fellows, 13 residents, 3 clerks), and nursing (31 staff). Field notes recording procedurally relevant communication events were analysed using a framework which considered the content, audience, purpose, and occasion of a communication exchange. A communication failure was defined as an event that was flawed in one or more of these dimensions. RESULTS: 421 communication events were noted, of which 129 were categorized as communication failures. Failure types included "occasion" (45.7% of instances) where timing was poor; "content" (35.7%) where information was missing or inaccurate, "purpose" (24.0%) where issues were not resolved, and "audience" (20.9%) where key individuals were excluded. 36.4% of failures resulted in visible effects on system processes including inefficiency, team tension, resource waste, workaround, delay, patient inconvenience and procedural error. CONCLUSION: Communication failures in the OR exhibited a common set of problems. They occurred in approximately 30% of team exchanges and a third of these resulted in effects which jeopardized patient safety by increasing cognitive load, interrupting routine and increasing tension in the OR. (Source: PubMed)

Manojlovich, M., & DeCicco, B. (2007). Healthy work environments, nurse-physician communication, and patients' outcomes. *American journal of critical care: An official publication, American Association of Critical-Care Nurses, 16*(6),

536-543.
BACKGROUND: Adverse events and serious errors are common in critical care. Although factors in the work environment are important predictors of adverse outcomes for patients, communication between nurses and physicians may be the most significant factor associated with excess hospital mortality in critical care settings. OBJECTIVES: To examine the relationships between nurses' perceptions of their practice environment, nurse-physician communication, and selected patients' outcomes. METHODS: A nonexperimental, descriptive design was used, and all nurses (N=866) working in 25 intensive care units in southeastern Michigan were surveyed. The Conditions for Work Effectiveness Questionnaire-II and the Practice Environment Scale of the Nursing Work Index were used to measure characteristics of the work environment; the ICU Nurse-Physician Questionnaire was used to measure nurse-physician communication. Nurses self-rated the frequency of ventilator-associated pneumonia, catheter-related sepsis, and medication errors in patients under their care. RESULTS: A total of 462 nurses (53%) responded. According to multilevel modeling, both practice environment scales accounted for 47% of the variance in nurse-physician communication scores (P=.001). Nurse-physician communication was predictive of nurse-assessed medication errors only (R2=0.11). Neither environment scale was predictive of any of the patient outcomes. CONCLUSIONS: Healthy work environments are important for nurse-physician communication. In intensive care units, characteristics of the work environment did not vary enough to be significantly predictive of outcomes, suggesting that even in various types of critical care units, characteristics of the work environment may be more similar than different. (Source: PubMed)

Maxfield, D., Grenny, J., McMillan, R., et al. (2005). *Silence kills: The seven crucial conversations for healthcare.* http://www.aacn.org/aacn/pubpolcy.nsf/Files/SilenceKills/$file/SilenceKills.pdf
The American Association of Critical-Care Nurses (AACN) commissioned VitalSmarts to conduct a study exploring communication difficulties experienced by health care personnel that may contribute to medical error. Areas of concern include broken rules, mistakes, lack of support, incompetence, poor teamwork,

disrespect, and micromanagement. (Source: Publisher)

McCallin, A., & Bamford, A. (2007). Interdisciplinary teamwork: Is the influence of emotional intelligence fully appreciated? *Journal of nursing management, 15*(4), 386-391.
AIM: The purpose of this study is to discuss how emotional intelligence affects interdisciplinary team effectiveness. Some findings from a larger study on interdisciplinary teamworking are discussed. BACKGROUND: Teams are often evaluated for complementary skill mix and expertise that are integrated for specialist service delivery. Interactional skills and emotional intelligence also affect team behaviour and performance. An effective team needs both emotional intelligence and expertise, including technical, clinical, social and interactional skills, so that teamwork becomes greater or lesser than the whole, depending on how well individuals work together. KEY ISSUES: Team diversity, individuality and personality differences, and interprofessional safety are analysed to raise awareness for nurse managers of the complexity of interdisciplinary working relationships. CONCLUSION: If nursing input into interdisciplinary work is to be maximized, nurse managers might consider the role of emotional intelligence in influencing team effectiveness, the quality of client care, staff retention and job satisfaction. (Source: PubMed)

McFadyen, A. K., Maclaren, W. M., & Webster, V. S. (2007). The interdisciplinary education perception scale (IEPS): An alternative remodelled sub-scale structure and its reliability. *Journal of interprofessional care, 21*(4), 433-443.
The original 4 sub-scale version of the Interdisciplinary Education Perception Scale (IEPS) was published by Luecht et al. (1990). There appears however to be a lack of evidence of the stability of the original instrument and of the test-retest reliability of the items and sub-scales when used with undergraduates. Given that during its development only 143 subjects completed the questionnaire which contained 18 items the generalizability of the instrument should perhaps have been investigated further. The Interprofessional Learning Group (IPL) at Glasgow Caledonian University has been using both the IEPS and the Readiness for Interprofessional Learning Scale (RIPLS) to monitor changes in attitudes and perceptions of undergraduate students from eight different health and social care

programmes. This paper reports the development of an alternative sub-scale model for the IEPS based on a sample of 308 students. Various aspects of the reliability of this revised model based on a subsequent data set of 247 students are also reported. This revised model appears to be stable for use with undergraduate students yielding Cronbach Alpha values for two of the sub-scales greater than 0.80 and test-retest weighted kappa values for items being fair to moderate. (Source: PubMed)

McKeon, L. M., Oswaks, J. D., & Cunningham, P. D. (2006). Safeguarding patients: Complexity science, high reliability organizations, and implications for team training in healthcare. *Clinical nurse specialist: The Journal for advanced nursing practice, 20*(6), 298-306.
Serious events within healthcare occur daily exposing the failure of the system to safeguard patient and providers. The complex nature of healthcare contributes to myriad ambiguities affecting quality nursing care and patient outcomes. Leaders in healthcare organizations are looking outside the industry for ways to improve care because of the slow rates of improvement in patient safety and insufficient application of evidenced-based research in practice. Military and aviation industry strategies are recognized by clinicians in high-risk care settings such as the operating room, emergency departments, and intensive care units as having great potential to create safe and effective systems of care. Complexity science forms the basis for high reliability teams to recognize even the most minor variances in expected outcomes and take strong action to prevent serious error from occurring. Cultural and system barriers to achieving high reliability performance within healthcare and implications for team training are discussed. (Source: PubMed)

Mickan, S. M., & Rodger, S. A. (2005). Effective health care teams: A model of six characteristics developed from shared perceptions. *Journal of interprofessional care, 19*(4), 358-370.
This study into understanding health care teams began with listening to participants' teamwork experiences. It unfolded through a dialectic of iterations, analyses and critique towards a simplified model comprising six key characteristics of effective teams. Using the complementary theoretical

perspectives of personal construct theory and inductive theory building, three research methods were used to collect a range of participant perspectives. A purposive sample of 39 strategic informants participated in repertory grid interviews and clarification questionnaires. A further 202 health care practitioners completed a purpose designed Teamwork in Healthcare Inventory. All responses were transformed through three iterations of interactive data collection, analysis, reflection and interpretation. Unstructured participant perspectives were qualitatively categorised and analysed into hierarchies to determine comparative contributions to effective teamwork. Complex inter-relationships between conceptual categories were investigated to identify four interdependent emerging themes. Finally, a dynamic model of teamwork in health care organisations emerged that has functional utility for health care practitioners. This Healthy Teams Model can be utilised in conjunction with a Reflective Analysis and Team Building Guide to facilitate team members to critically evaluate and enhance their team functioning. (Source: PubMed)

Miers, M. E., Clarke, B. A., Pollard, K. C., Rickaby, C. E., Thomas, J., & Turtle, A. (2007). Online interprofessional learning: The student experience. *Journal of interprofessional care, 21*(5), 529-542.
Health and social care students in a faculty in the United Kingdom learn together in an interprofessional module through online discussion boards. The module assessment encourages engagement with technology and with group members through peer review. An evaluation of student experience of the module gathered data from 48 students participating in 10 online groups. Analysis of contributions to discussion boards, and transcripts of interviews with 20 students revealed differing levels of participation between individuals and groups. Many students were apprehensive about the technology and there were different views about the advantages and disadvantages of online learning. Students interacted in a supportive manner. Group leadership was seen as associated with maintaining motivation to complete work on time. Students reported benefiting from the peer review process but were uncomfortable with critiquing each other's work. Sensitivity about group process may have inhibited the level of critical debate. Nevertheless the module brought together students from different professions

and different sites. Examples of sharing professional knowledge demonstrated successful interprofessional collaboration online. (Source: PubMed)

Morris, A. H., & Faulk, D. (2007). Perspective transformation: enhancing the development of professionalism in RN-to-BSN students. *The Journal of nursing education, 46*(10), 445-451.
The purpose of this research was to examine whether there are resultant behavioral changes in professionalism for returning adult RN-to-BSN students and to identify teaching-learning activities that stimulate transformative learning. Mezirow's adult learning theory served as a theoretical guide for the study. A convenience sample of students enrolled in a RN-to-BSN completion program during 2 academic years was surveyed using the core standards from the American Association of Colleges of Nursing's essentials of baccalaureate nursing education. A total of 26 learning activities were identified as creating cognitive dissonance (conflict of values). Changes in professional behavior 3 months postgraduation included increased collaboration with the health care team, increased patient advocacy, and increased confidence in the role as a teacher of patients and families. The findings indicate that planning learning activities in nursing curricula can foster perspective transformation in professionalism. (Source: PubMed)

Neill, M., Hayward, K. S., & Peterson, T. (2007). Students' perceptions of the interprofessional team in practice through the application of servant leadership principles. *Journal of interprofessional care, 21*(4), 425-432.
This study examined students' perceptions of interprofessional practice within a framework of servant leadership principles, applied in the care of rural older adults utilizing a service learning model. Mobile wellness services were provided through the Idaho State University Senior Health Mobile project in a collaborative team approach in the community-based setting. Students from varied health professional programs were placed in teams for the provision of wellness care, with communication among team members facilitated by a health professions faculty member serving as field coordinator. The Interdisciplinary Education Perception Scale (IEPS) was used to measure students' perceptions of interprofessional practice using a pretest post-test research design. Multivariate

analysis was performed revealing a significant pretest to post-test effect on students' perceptions as measured by factors inherent in the IEPS and deemed essential to effective interprofessional practice. Univariate analysis revealed a significant change in students' perception of professional competence and autonomy, actual cooperation and resource sharing within and across professions, and an understanding of the value and contributions of other professionals from pretest to post-test. (Source: PubMed)

Nelson, G. A., King, M. L., & Brodine, S. (2008). Nurse-physician collaboration on medical-surgical units. *MEDSURG nursing, 17*(1), 35-40.
Interdisciplinary collaboration is viewed as a critical factor in delivering quality patient care. The purpose of this study was to describe nurse-physician perceptions of collaboration relationship on general medical-surgical units. (Source: PubMed)

Nisbet, G., Hendry, G. D., Rolls, G., & Field, M. J. (2008). Interprofessional learning for pre-qualification health care students: An outcomes-based evaluation. *Journal of interprofessional care, 22*(1), 57-68.
Within health, it is widely acknowledged that a collaborative, team-oriented approach to care is required to ensure patient safety and quality of service delivery. A pre-qualification interprofessional learning experience should provide an ideal opportunity for students to gain the necessary knowledge, skills and attitudes to enable them to work as part of a patient-centred interprofessional team. In this article we report a multidimensional evaluation of a pre-qualification interprofessional learning (IPL) program. The program brings together senior year students from various health care professions on clinical placement in the same service area of a hospital to take part in shared, structured learning experiences centred on interprofessional teamwork. We used a combination of qualitative and quantitative methods to evaluate the IPL program. Results indicate that students' understanding of the roles of other team members was enhanced, and students and supervisors perceived the program to be of value for student learning. Measured changes in attitude were limited. Unexpected findings emerged in relation to role responsibilities within teams and attitudes towards doctors. We conclude that such programs have the potential to expand

students' understanding of the contributions made by other professionals/ colleagues to effective patient care, although challenges persist in overcoming pre-existing role stereotypes. (Source: Publisher)

Philippon, D. J., Pimlott, J. F., King, S., Day, R. A., & Cox, C. (2005). Preparing health science students to be effective health care team members: The InterProfessional initiative at the University of Alberta. *Journal of interprofessional care, 19*(3), 195-206.
The InterProfessional Initiative at the University of Alberta in Edmonton, Alberta, Canada, provides learning strategies to be effective health care team members for over 800 undergraduate students in 14 health professions. This paper traces the evolution of the initiative over the past decade and describes future directions. Particular attention is given to the administrative and academic structures and processes required to launch, develop and sustain an initiative of this scale in a major research-intensive university. The paper concludes by reviewing the evaluative work underway and reflecting on the key success factors. (Source: PubMed)

Pollard, K. C. (2008). Non-formal learning and interprofessional collaboration in health and social care: The influence of the quality of staff interaction on student learning about collaborative behaviour in practice placements. *Learning in health & social care, 7*(1), 12-26.
This paper reports findings from a qualitative study exploring pre-qualifying health and social care students' experiences of interprofessional learning and working in practice placement settings. The author argues that processes of non-formal learning and unconscious role modelling in these environments are key to students' developing collaborative skills. Semi-structured interviews were conducted with a quota sample of 52 students from 10 health and social care professions. Data were analysed thematically. The nature of interprofessional collaboration varied across different settings, with students encountering a more disparate range of professions and agencies in community and social work settings than in acute healthcare settings. Most students appeared to have been exposed to examples of both effective and poor collaborative working. Although many students characterized interprofessional collaboration in placement settings

as 'good', this assessment often conflicted with their description of behaviour that could be considered to constitute suboptimal collaborative practice. Students perceived the quality of interprofessional interaction to depend mainly on interpersonal communication, showing little awareness of how organizational systems influence collaboration. The findings show that some staff in placement settings experienced problems when working with colleagues from other disciplines, and indicate that consequently, through processes of non-formal learning and unconscious role modelling, some students may have learned inappropriate behaviours with regard to interprofessional working. Although students were not necessarily expected to appreciate the importance of appropriate organizational systems for the establishment and maintenance of effective interprofessional collaboration, it appeared that staff members might also not be aware of these issues. The author argues that staff in placement settings need to understand and model the relevant capacities in order to provide students with appropriate learning opportunities in this regard. It appears that qualified staff need support to develop their own collaborative practice, so that they are able effectively to support students' interprofessional learning and working in practice. (Source: PubMed)

Posel, N., Fleiszer, D., Wiseman, J., Birlean, C., Margison, J., Faremo, S., et al. (2008). Using electronic cases to teach healthcare professionals and students about interprofessionalism. *Journal of interprofessional care, 22*(1), 111-114. Using an e-case application, healthcare professionals in a workshop integrated their uni-professional perspectives into a “blueprint” that was validated and formed the basis of an interprofessional care plan. The workshop highlighted the utility of this process and emphasized the benefits of developing an interdependent, interprofessional approach to patient and family care. It demonstrated that the e-case was an effective interprofessional teaching activity. Workshop facilitators have subsequently received requests for additional e-case based workshops, two of which are now in the planning stages. An abridged version of the e-case was used at a student interprofessional conference. Additional student initiatives are planned. (Source: Publisher)

Posey, L., & Pintz, C. (2006). Online teaching strategies to improve collaboration

among nursing students. *Nurse education today, 26*(8), 680-687.
Collaborative problem-solving is an essential competency for nurses and all health professionals. This paper compares the design characteristics and educational benefits of three online-teaching strategies that nurse educators can use to build the critical thinking and social skills needed for effective collaboration: computer supported collaborative learning, case-based facilitated discussion, and cognitive flexibility hypermedia. These strategies support a critical instructional outcome required for effective collaboration: the ability to examine, assess, and synthesize multiple perspectives to resolve illstructured problems (i.e., problems for which there is no clear-cut solution). Descriptions, examples, and guidelines for implementing each strategy are provided. By integrating these strategies into their online courses, nurse educators can prepare nurses to work effectively with others to solve complex problems in clinical practice and the broader health-care system. (Source: PubMed)

Pullon, S. (2008). Competence, respect and trust: Key features of successful interprofessional nurse-doctor relationships. *Journal of interprofessional care, 22*(2), 133-147.
Professional relationships between doctors and nurses have often been seen as problematic, a barrier to effective collaborative practice, yet little is known about the intrinsic nature of such relationships in the primary care context. This study set out to explore roles of, and relationships between, nurses and doctors currently working in New Zealand primary care settings. Using a qualitative methodology, data were collected using in-depth interviews with 18 individual nurses and doctors working in primary care settings in Wellington, New Zealand. Doctors' and nurses' perceptions of their own and each others' roles, and the perceived relationships between individuals from both disciplinary groups were explored, using principles of naturalistic enquiry in a mixed method of analysis. The study findings indicate that effective interprofessional relationships between individual doctors and nurses can, and often do, exist in New Zealand primary care settings, although they are not universal. The identification and separation of vocational and business roles, and the development of professional identity, form the basis for a theory of trust development in nurse-doctor interprofessional

relationships in New Zealand primary care. Professional identity is related to demonstration of professional competence, in turn related to development of mutual interprofessional respect and enduring interprofessional trust. (Source: PubMed)

Puntillo, K. A., & McAdam, J. L. (2006). Communication between physicians and nurses as a target for improving end-of-life care in the intensive care unit: Challenges and opportunities for moving forward. *Critical care medicine, 34*(11 Suppl), S332-40.
Our objective was to discuss obstacles and barriers to effective communication and collaboration regarding end-of-life issues between intensive care unit nurses and physicians. To evaluate practical interventions for improving communication and collaboration, we undertook a systematic literature review. An increase in shared decision making can result from a better understanding and respect for the perspectives and burdens felt by other caregivers. Intensive care unit nurses value their contributions to end-of-life decision making and want to have a more active role. Increased collaboration and communication can result in more appropriate care and increased physician/nurse, patient, and family satisfaction. Recommendations for improvement in communication between intensive care unit physicians and nurses include use of joint grand rounds, patient care seminars, and interprofessional dialogues. Communication interventions such as use of daily rounds forms, communication training, and a collaborative practice model have shown positive results. When communication is clear and constructive and practice is truly collaborative, the end-of-life care provided to intensive care unit patients and families by satisfied and engaged professionals will improve markedly. (Source: PubMed)

Reeves, S., Goldman, J., & Oandasan, I. (2007). Key factors in planning and implementing interprofessional education in health care settings. *Journal of allied health, 36*(4), 231-235.
Interprofessional education (IPE) is regarded by many health care practitioners (i.e., nurses, occupational therapists, physicians), educators, and policy makers as an important activity to enhance the quality of teamwork and patient care. While the focus on developing an evidence basis for IPE has demonstrated the

potential value of IPE for improving collaboration and patient outcomes, exploration of key concepts that underpin IPE has been overlooked. In this commentary, we aim to begin addressing this oversight by identifying and discussing key conceptual factors that are critical for the planning and implementation of IPE. We draw upon our prior IPE curricula development and research experiences, as well as the published literature, to argue that seven interconnecting learner-focused, faculty-focused, and organization-focused factors are key to the successful planning and implementation of IPE. We also argue that IPE planners need to be cognizant of all seven factors and how they interact with one another to help ensure they maximize success in their work. (Source: PubMed)

Ross, A., King, N., & Firth, J. (2005). Interprofessional relationships and collaborative working: Encouraging reflective practice. *Online journal of issues in nursing, 10*(1), 12p from http://www.nursingworld.org/ojin/topic26/tpc26_3.htm. A challenge for those involved in the education and professional development of health and social care practitioners is to find ways of encouraging and enabling them to critically reflect upon complex collaborative situations and consider how they might improve interprofessional relationships. To meet this challenge, we piloted and developed a reflective exercise derived from methods used in personal construct psychology, which has proved to be useful in three overlapping areas; research, professional development, and classroom teaching. To illustrate the technique, this paper presents a case study of one district nurse who used the method to help her examine complex interprofessional relationships when providing long-term community care. The reflective technique (which uses arrow-shaped cards displayed on large visual layouts) was found to provide a rich description of the individual's relationships. By employing the visual displays the district nurse was able to explore the meanings of professional identity and roles in terms of professional relationships, and to consider her intentions and actions within a complex multidisciplinary situation. (Source: PubMed)

Russell, L., Nyhof-Young, J., Abosh, B., & Robinson, S. (2006). An exploratory analysis of an interprofessional learning environment in two hospital clinical

teaching units. *Journal of interprofessional care, 20*, 29-39.
An analysis of a teaching environment with regard to interprofessional practice was done using both qualitative and quantitative methods. Medical, nursing and other health professional staff and students from two hospital units (medical and surgical) completed two surveys. The students were also interviewed. Staff differed in survey results among disciplines, with nurses and other health professionals having a more positive view of interprofessional collaboration than physicians. Student interviews supported our hypothesis that little formal or informal interprofessional education occurred during clinical rotations. Students had little understanding of the nature of collaborative behavior, and appeared to learn their discipline's attitudes and practices through tacit observation of staff behaviors. This appears to reinforce disciplinary stereotypes, and may be a significant barrier to the development of collaborative practice. These results have implications for the design of interprofessional curriculum in clinical practicums. (Source: PubMed)

Schofield, R. F., & Amodeo, M. (1999). Interdisciplinary teams in health care and human services settings: Are they effective? *Health & social work, 24*(3), 210-219.
Empirical evidence for the efficacy of interdisciplinary teams is essential in the current context of managed care. Because careful assessment of the interdisciplinary team has important implications for patients and health care professionals, as well as employers, the authors read over 2,200 abstracts and analyzed 224 articles from four databases in eight health-related fields. Articles were grouped by the type of analysis engaged in by their authors (descriptive, process-focused, empirical, or outcome), by methodology (none, general research, or quantitative), and by domains of interest (patient care, personnel, or management). Findings indicate significant weaknesses in terminology and research content. Directions for future research that would help ascertain the contribution of the interdisciplinary team are outlined. (Source: PubMed)

Selle, K. M., Salamon, K., Boarman, R., & Sauer, J. (2008). Providing interprofessional learning through interdisciplinary collaboration: The role of "modelling". *Journal of interprofessional care, 22*(1), 85-92.

Faculty from four disciplines at a small Liberal Arts College in an American Midwestern city collaborated on an interdisciplinary pre-service project. Students in nursing, physical therapy, social work and special education voluntarily participated in one of two group methods of teaching. The purpose of this study was to examine whether students learn interprofessional teaming more effectively from (i) discussion of research, faculty modeling and role-playing, or from (ii) discussion of research and role-playing. Results from the evaluation suggested both groups benefited from discussions and role-playing related to interprofessional team meetings. A significant difference between students who observed faculty modeling and those who did not was found. The paper discusses the importance of preparing college students for interprofessional collaboration in light of current research. (Source: PubMed)

Shannon, S. E. (1997). The roots of interdisciplinary conflict around ethical issues. *Critical care nursing clinics of North America, 9*(1), 13-28.
Interdisciplinary conflict around ethical issues is an important problem. This article addresses some of the myths and stereotypes that hamper collaboration and suggests five reasons for interdisciplinary conflicts around care of the critically-ill patient that stem from professional training and socialization. These include differences in clinical judgment style, differences in calculating and valuing patient survival, differences in information from the patient and family, differences in perceptions of potential legal repercussions, and different views of patient advocacy and patient autonomy. The author concludes by making suggestions for changes in education and practice. (Source: Publisher)

Sherwood, G., & Drenkard, K. (2007). Quality and safety curricula in nursing education: Matching practice realities. *Nursing outlook, 55*(3), 151-155.
Health care delivery settings are redesigning in the wake of staggering reports of severe quality and safety issues. Sweeping changes underway in health care to address quality and safety outcomes lend urgency to the call to transform nursing curricula so new graduate competencies more closely match practice needs. Emerging views of quality and safety and related competencies as applied in practice have corresponding implications for the redesign of nursing education programs. Nurse executives and nurse educators are called to address the need

for faculty development through strategic partnerships. (Source: PubMed)

Sherwood, G., Thomas, E., Bennett, D. S., & Lewis, P. (2002). A teamwork model to promote patient safety in critical care. *Critical care nursing clinics of North America, 14*(4), 333-340.
To create a safe health care system, providers must understand teamwork as a complementary relationship of interdependence. Continuing efforts to adopt the aviation model will enable health care providers to examine the role of human performance factors related to fatigue, leadership, and communication among all providers. The aviation model provides a basis for designing teamwork programs to reduce error and introduces human factor principles and key skills to be learned. Health care providers need explicit instruction in communication and teamwork rather than learning by trial and error, which can instill unintended values, attitudes, and behaviors. The growing research base continues to examine the problem of health care safety and to test the most effective team training approaches. What is the most effective pattern and timing of communication among providers? What system level changes are needed in the critical care area to improve communication through teamwork and thus create a safer health care system? What are potential points of error in the daily operation that could be alleviated through effective teamwork? Continuing to test the model will ultimately change patient safety. (Source: PubMed)

Shorthall, R. (2007). Preventing adverse events. *Emergency nurse, 15*(3), 26-28.
Roseanne Shorthall reflects on a potentially adverse event that occurred when she was a nursing student to demonstrate how communication failures can hamper patient care. (Source: Publisher)

Sievers, B., & Wolf, S. (2006). Achieving clinical nurse specialist competencies and outcomes through interdisciplinary education. *Clinical nurse specialist: CNS, 20*(2), 75-80.
Without formal education, many healthcare professionals fail to develop interdisciplinary team skills; however, when students are socialized to interdisciplinary practice through academic clinical learning experiences, effective collaboration skills can be developed. Increasingly, educational environments are

challenged to include clinical experiences for students that teach and model interdisciplinary collaboration. PURPOSE: The purpose of this quality improvement initiative was to create an interdisciplinary educational experience for clinical nurse specialist (CNS) students and postgraduate physicians. DESCRIPTION OF THE PROJECT: The interdisciplinary learning experience, supported by an educational grant, provided an interdisciplinary cohort of learners an opportunity to engage in a clinically focused learning experience. The interdisciplinary cohort consisted of CNS students and physicians in various stages of postgraduate training. The clinical experience selected was a quality improvement initiative in which the students were introduced to the concepts and tools of quality improvement. During this 1-month clinical experience, students applied the new skills by implementing a quality improvement project focusing on medication reconciliation in the outpatient setting. The CNS core competencies and outcomes were used to shape the experience for the CNS students. OUTCOME: The CNS students exhibited 5 of the 7 essential characteristics of the CNS (leadership, collaboration, consultation skills, ethical conduct, and professional attributes) while demonstrating competencies and fulfilling performance expectations. During this learning experience, the CNS students focused on competencies and outcomes in the organizational sphere of influence. Multiple facilitating factors and barriers were identified. CONCLUSION: This interdisciplinary clinical experience in a quality improvement initiative provided valuable opportunities for CNS students to develop essential CNS characteristics and to explore practice competencies in the area of systems. IMPLICATIONS: Interdisciplinary clinical experiences offer students opportunities to develop needed collaboration and communication skills. Educators should create interdisciplinary educational experiences for students to better prepare them for their roles in a clinical setting. (Source: PubMed)

Smetzer, J. L., & Cohen, M. R. (2005). Intimidation: Practitioners speak up about this unresolved problem. *Joint Commission journal on quality & patient safety, 31*(1), 594-599.

A 2003–2004 Institute for Safe Medication Practices (ISMP) survey of more than 2,000 health care providers from hospitals (1,565 nurses, 354 pharmacists, 176

others) confirmed that intimidating behaviors continue to be far from isolated events in health care—and are not necessarily limited to a few difficult physicians, or for that matter, to physicians alone. (Source: QSEN Team)

Smith, E. L., Cronenwett, L., & Sherwood, G. (2007). Current assessments of quality and safety education in nursing. *Nursing outlook, 55*(3), 132-137.
Concerns about the quality and safety of health care have changed practice expectations and created a mandate for change in the preparation of health care professionals. The Quality and Safety Education for Nurses project team conducted a survey to assess current levels of integration of quality and safety content in pre-licensure nursing curricula. Views of 195 nursing program leaders are presented, including information about satisfaction with faculty expertise and student competency development related to 6 domains that define quality and safety content: patient-centered care, teamwork and collaboration, evidence-based practice, quality improvement, safety, and informatics. With competency definitions as the sole reference point, survey respondents indicated that quality and safety content was embedded in current curricula, and they were generally satisfied that students were developing the desired competencies. These data are contrasted with work reported elsewhere in this issue of Nursing Outlook and readers are invited to consider a variety of interpretations of the differences. (Source: PubMed)

Solheim, K., McElmurry, B. J., & Kim, M. J. (2007). Multidisciplinary teamwork in US primary health care. *Social science & medicine, 65*(3), 622-634.
Primary health care (PHC) is a systems perspective for examining the provision of essential health care for all. A multidisciplinary collaborative approach to health care delivery is associated with effective delivery and care providers' enrichment. Yet data regarding multidisciplinary practice within PHC are limited. The purpose of this exploratory qualitative descriptive study was to better understand team-based PHC practice in the US. Aims included (a) describing nursing faculty involvement in PHC, (b) analyzing ways that multidisciplinary work was enacted, and (c) recommending strategies for multidisciplinary PHC practice. After institutional review board (IRB) protocol approval, data collection occurred by: (a) surveying faculty/staff in a Midwestern nursing college (*N*=94)

about their PHC practice, and (b) interviewing a purposive sample of nursing faculty/staff identified with PHC (*n*=10) and their health professional collaborators (*n*=10). Survey results (28% return rate) were summarized, interview notes were transcribed, and a systematic process of content analysis applied. Study findings show team practice is valued because health issues are complex, requiring different types of expertise; and because teams foster comprehensive care and improved resource use. Mission, membership attributes, and leadership influence teamwork. Though PHC is not a common term, nurses and their collaborators readily associated their practice with a PHC ethos. PHC practice requires understanding community complexity and engaging with community, family, and individual viewpoints. Though supports exist for PHC in the US, participants identified discord between their view of population needs and the health care system. The following interpretations arise from this study: PHC does not explicitly frame health care activity in the US, though some practitioners are committed to its ethics; and, teamwork within PHC is associated with better health care and rewarding professional experience. Nurses integrate PHC in multiple roles and are experts at aspects of PHC teamwork. (Source: Publisher)

Stein-Parbury, J., & Liaschenko, J. (2007). Understanding collaboration between nurses and physicians as knowledge at work. *American journal of critical care, 16*(5), 470-7.

BACKGROUND: Collaboration between nurses and physicians is linked to positive outcomes for patients, especially in the intensive care unit. However, effective collaboration poses challenges because of traditional barriers such as sex and class differences, hierarchical organizational structures in health-care, and physicians' belief that they are the final arbiter of clinical decisions. OBJECTIVE: To further analyze the results of an investigation on how intensive care unit culture, expressed through everyday practices, affected the care of patients who became confused. METHODS: A model of the types of knowledge (case, patient, and person) used in clinical work was used to analyze the breakdown in collaboration detected in the original study. RESULTS: Breakdown of collaboration occurred because of the types of knowledge used by physicians and nurses. Certain types of knowledge were privileged even when not applicable to the

clinical problem, whereas other types were dismissed even when applicable. CONCLUSION: Viewing collaboration through the conceptual lens of knowledge use reveals new insights. Collaboration broke down in the specific context of caring for patients with confusion because the use of case knowledge, rather than patient knowledge, was prominent in the intensive care unit culture. (Source: PubMed)

Stephens, J., Abbott-Brailey, H., & Pearson, P. (2007). "It's a funny old game". Football as an educational metaphor within induction to practice-based interprofessional learning. *Journal of interprofessional care, 21*(4), 375-385.
The Common Learning Programme in the North East of England (CLPNE) sought to introduce interprofessional education into the practice setting for pre-registration health and social care students. Students, clinical educators/mentors, and facilitators met within groups over a period of 3 - 6 weeks to explore interprofessional working and learning together. This paper evaluates the use of a game, the Football Stadium, to stimulate participants' exploration of practice-based interprofessional working and learning at CLPNE induction sessions. Data consisting of verbal and written feedback from students and clinical educators/ mentors, and field notes from facilitators covering 22 CLPNE pilot sites (February 2003 - July 2005) was supplemented by researcher observation at 12 sites. Two themes emerged from the data: the use of the Football Stadium as an "ice-breaker" at team induction and, the use of the Football Stadium as a vehicle to facilitate reflective learning. Key issues included personal identity and role within a novice--expert continuum, creating and developing the team environment and, enhancing and developing learning communities. Although recognized as requiring careful, sensitive facilitation, the Football Stadium is a simple means to present learning opportunities for interprofessional education within a non-threatening learning environment that facilitates active participation. (Source: PubMed)

Sterchi, L. S. (2007). Perceptions that affect physician-nurse collaboration in the perioperative setting. *AORN journal, 86*(1), 45.
PHYSICIAN-NURSE COLLABORATION is crucial for safe patient care, particularly in the complex setting of the surgical arena. IN THIS STUDY, the Jefferson Scale

of Attitudes Toward Physician-Nurse Collaboration was used to measure physicians' and nurses' perceptions and attitudes toward collaboration in the surgical setting and to determine whether there were differences in these perceptions based on gender, nursing specialty, or length of experience. RESULTS SHOWED THAT NURSES had a more positive attitude toward collaboration than did physicians. Differences in attitudes based on gender could not be determined, and nursing specialty was not a significant factor. Length of experience, however, proved to have an interesting influence. (Source: PubMed)

Sternas, K. A., O'Hare, P., Lehman, K., & Milligan, R. (1999). Nursing and medical student teaming for service learning in partnership with the community: An emerging holistic model for interdisciplinary education and practice. *Holistic nursing practice, 13*(2), 66-77.
To meet the health needs of communities today, health professionals need to be trained in working with persons from various cultural backgrounds, practicing disease prevention and health promotion in community-based settings, and working in teams with other professionals. The article focuses on interdisciplinary teaming for education and practice. In this model, medical and nursing students partner with communities to plan and deliver health promotion education programs and activities. Four service learning projects providing collaborative teaming opportunities as part of the Health Professions Schools in Service to the Nation Program are described. Interdisciplinary service learning has benefits for the community, students, and faculty and will prepare nurses and physicians to have a positive impact on care through future interdisciplinary collaboration in community-based settings. (Source: PubMed)

Storch, J. L., & Kenny, N. (2007). Shared moral work of nurses and physicians. *Nursing ethics, 14*(4), 478-491.
Physicians and nurses need to sustain their unique strengths and work in true collaboration, recognizing their interdependence and the complementarity of their knowledge, skills and perspectives, as well as their common moral commitments. In this article, challenges often faced by both nurses and physicians in working collaboratively are explored with a focus on the ways in which each profession's preparation for practice has differed over time, including shifts in knowledge

development and codes of ethics guiding their practice. A call for envisioning their practice as shared moral work as well as practical strategies to begin that work are offered as a basis for reflection towards enhanced nurse-physician relationships. (Source: PubMed)

Tamura, Y., Bontje, P., Nakata, Y., Ishikawa, Y., & Tsuda, N. (2005). Can one eat collaboration? Menus as metaphors of interprofessional collaboration. *Journal of interprofessional care, 19*(3), 215-222.
The turn of the century has seen a sudden upsurge in publications and initiatives around the development of interprofessional collaboration in Japan. In Japanese, the term 'team-treatment' is generally used to mean interprofessional collaboration, but hitherto there have been no generally accepted definitions and conceptualizations of the term, nor are there guidelines as to how it may be implemented in practice. In order to facilitate understanding of the different modes of interprofessional collaboration and issues in practice, we introduced the use of menus as metaphors for interprofessional collaboration in a class of first year students of nursing. There were two 90-minute classes available for exploring this topic. Through the use of a metaphor the students demonstrated they were able to conceptualize interprofessional collaboration, identify the value of nurses working together with other professionals and issues involved in making team-treatment work. The purpose of this paper is to share the experience of using metaphors as a teaching/learning strategy, including reflection on the successes and some limitations of what, for us, was an interesting educational innovation. (Source: PubMed)

Thomas, E. J., Sherwood, G. D., & Helmreich, R. L. (2003). Lessons from aviation: Teamwork to improve patient safety. *Nursing economic$, 21*(5), 241-243.
Medical errors may contribute to as many as 44,000 to 98,000 deaths per year. Effective teamwork may serve to avoid and manage error and also address increasing staff shortages, the growing need for cost reduction, and increasing patient expectations. The Institute of Medicine and others have encouraged health care providers to look to the aviation industry because of its long history of measuring and improving teamwork to prevent and mitigate errors. (Source:

Publisher)

Thomas, S. (2007). Nurse-physician collaboration: a comparison of the attitudes of nurses and physicians in the medical-surgical patient care setting. *MEDSURG nursing, 16*(2), 87.
Past literature reveals the multiple dimensions of the nurse-physician relationship. The current study was conducted within medical-surgical units of a major medical center in the South to determine attitudes of nurses and physicians regarding their collaboration. (Source: Publisher)

Thompson, D. E. (2007). Interprofessionalism in health care: Communication with the patient's identified family. *Journal of interprofessional care, 21*(5), 561-563.
Communication with the patient's identified family is one of the most important and ongoing service to be provided by the inter-professional team in health care. Placing this important service within the context of "attachment, security and trust" should help professional team members to learn how to configure patient's families into the circle of health care collaboration. The communication offered to the patient and patient's family is the most important aspect to inter-professionalism within health care. Breakdowns in this communication of trust can have drastic effects with long standing emotional impact. (Source: PubMed)

Thornby, D. (2006). Beginning the journey to skilled communication. *AACN Advanced critical care, 17*, 266-271.
Intimidating behavior and deficient interpersonal skills create a culture of silence, where there can be a breakdown in team communications and an inability to collaborate and achieve high-quality outcomes. A study from VitalSmarts (Provo, Utah), Silence Kills: The Seven Crucial Conversations for Healthcare, described 7 crucial conversations healthcare professionals struggle with that contribute to patient harm and unacceptable error rates. The American Association of Critical-Care Nurses' first standard (from AACN Standards for Establishing and Sustaining Healthy Work Environments: A Journey to Excellence), skilled communication, states: "Nurses must be as proficient in communication skills as they are in clinical skills." Once it is accepted that being competent in skilled communication is essential to excellent patient care, it then takes skill development and added

courage to hold crucial conversations and address difficult situations. The first step begins with a self-assessment to determine current effectiveness as a communicator and manager of conflict and to realize opportunities for growth. Three key strategies to begin the development of skilled communication include: (1) understanding the importance of a climate of safety, (2) acknowledging one's mental stories, and (3) realizing that the only people we control are ourselves. (Source: PubMed)

Varkey, P., Reller, M. K., Smith, A., Ponto, J., & Osborn, M. (2006). An experiential interdisciplinary quality improvement education initiative. *American journal of medical quality, 21*(5), 317-322.
Seven learners, including 2 preventive medicine fellows, 2 family medicine residents, 1 internal medicine resident, and 2 master's-level nursing students participated in an experiential 4-week quality improvement rotation at a major academic medical center. Together they worked on a quality improvement project that resulted in enhanced medication reconciliation in a preventive medicine clinic. Learner knowledge measured on the QI Knowledge Application Tool increased from an average of 2.33 before the start of the rotation to 3.43 (P = .043) by the end of the rotation. At the conclusion, all learners said they were confident or very confident that they could make a change to improve health care in a local setting. Although this pilot supports the feasibility and potential benefits of interdisciplinary quality improvement education, further research is necessary to explore strategies to implement the same on a larger scale, and to examine the impact on patient outcomes. (Source: PubMed)

Xyrichis, A., & Lowton, K. (2008). What fosters or prevents interprofessional teamworking in primary and community care? A literature review. *International journal of nursing studies, 45*(1), 140-153.
BACKGROUND: The increase in prevalence of long-term conditions in Western societies, with the subsequent need for non-acute quality patient healthcare, has brought the issue of collaboration between health professionals to the fore. Within primary care, it has been suggested that multidisciplinary teamworking is essential to develop an integrated approach to promoting and maintaining the health of the population whilst improving service effectiveness. Although it is

becoming widely accepted that no single discipline can provide complete care for patients with a long-term condition, in practice, interprofessional working is not always achieved. OBJECTIVES: This review aimed to explore the factors that inhibit or facilitate interprofessional teamworking in primary and community care settings, in order to inform development of multidisciplinary working at the turn of the century. DESIGN: A comprehensive search of the literature was undertaken using a variety of approaches to identify appropriate literature for inclusion in the study. The selected articles used both qualitative and quantitative research methods. FINDINGS: Following a thematic analysis of the literature, two main themes emerged that had an impact on interprofessional teamworking: team structure and team processes. Within these two themes, six categories were identified: team premises; team size and composition; organisational support; team meetings; clear goals and objectives; and audit. The complex nature of interprofessional teamworking in primary care meant that despite teamwork being an efficient and productive way of achieving goals and results, several barriers exist that hinder its potential from becoming fully exploited; implications and recommendations for practice are discussed. CONCLUSIONS: These findings can inform development of current best practice, although further research needs to be conducted into multidisciplinary teamworking at both the team and organisation level, to ensure that enhancement and maintenance of teamwork leads to an improved quality of healthcare provision. (Source: PubMed)

Xyrichis, A., & Ream, E. (2008). Teamwork: a concept analysis. *Journal of advanced nursing, 61*(2), 232-241.
AIM: This paper is a report of an analysis of the concept of teamwork. BACKGROUND: Teamwork is seen as an important facilitator in delivering quality healthcare services internationally. However, research studies of teamwork in health care are criticized for lacking a basic conceptual understanding of what this concept represents. A universal definition for healthcare settings and professionals is missing from published literature. METHOD: Walker and Avant's approach was used to guide this concept analysis. Literature searches used bibliographic databases (Medline, CINAHL, Web of Science, Proquest CSA),

internet search engines (GoogleScholar), and hand searches. Literature published between 1976 and 2006 was reviewed but only material in English was included. FINDINGS: Based on the analysis undertaken, teamwork is proposed as a dynamic process involving two or more healthcare professionals with complementary backgrounds and skills, sharing common health goals and exercising concerted physical and mental effort in assessing, planning, or evaluating patient care. This is accomplished through interdependent collaboration, open communication and shared decision-making, and generates value-added patient, organizational and staff outcomes. CONCLUSION: Praising the value of teamwork without a common understanding of what this concept represents endangers both research into this way of working and its effective utilization in practice. The proposed definition helps reconcile discrepancies between how this concept is understood by nurses and doctors, as well as allied health professionals. A common understanding can facilitate communication in educational, research and clinical settings and is imperative for improving clarity and validity of future research. (Source: PubMed)

Zwarenstein, M., Reeves, S., Russell, A., Kenaszchuk, C., Gotlib Conn, L., Miller, K. L., et al. (2007). Structuring communication relationships for interprofessional teamwork (SCRIPT): A cluster randomized controlled trial. *Trials, 8*(1), 23. ABSTRACT: BACKGROUND: Despite a burgeoning interest in using interprofessional approaches to promote effective collaboration in health care, systematic reviews find scant evidence of benefit. This protocol describes the first cluster randomized controlled trial (RCT) to design and evaluate an intervention intended to improve interprofessional collaborative communication and patient-centred care. The objective is to evaluate the effects of a four-component, hospital-based staff communication protocol designed to promote collaborative communication between healthcare professionals and enhance patient-centred care. METHODS: The study is a multi-centre mixed-methods cluster randomized controlled trial involving twenty clinical teaching teams (CTTs) in general internal medicine (GIM) divisions of five Toronto tertiary-care hospitals. CTTs will be randomly assigned either to receive an intervention designed to improve interprofessional collaborative communication, or to continue usual

communication practices. Non-participant naturalistic observation, shadowing, and semi-structured, qualitative interviews were conducted to explore existing patterns of interprofessional collaboration in the CTTs, and to support intervention development. Interviews and shadowing will continue during intervention delivery in order to document interactions between the intervention settings and adopters, and changes in interprofessional communication. The primary outcome is the rate of unplanned hospital readmission. Secondary outcomes are length of stay (LOS); adherence to evidence-based prescription drug therapy; patients' satisfaction with care; self-report surveys of CTT staff perceptions of interprofessional collaboration; and frequency of calls to paging devices. Outcomes will be compared on an intention-to-treat basis using adjustment methods appropriate for data from a cluster randomized design. DISCUSSION: Pre-intervention qualitative analysis revealed that a substantial amount of interprofessional interaction lacks key core elements of collaborative communication such as self-introduction, description of professional role, and solicitation of other professional perspectives. Incorporating these findings, a four-component intervention was designed with a goal of creating a culture of communication in which the fundamentals of collaboration become a routine part of interprofessional interactions during unstructured work periods on GIM wards. Trial Registration: Registered with National Institutes of Health as NCT00466297. (Source: PubMed)

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