The 2008 Institute of Medicine (IOM) report, *Retooling for an Aging America: Building the Health Care Workforce*, emphasizes the importance of training all healthcare professionals in the skills needed to work effectively in teams, and calls for the implementation of new geriatric care models that utilize interdisciplinary teams.

Geriatrics and gerontology have been at the forefront of interdisciplinary team training since the 1970s. This approach continues to be of critical importance in providing efficient and well-coordinated geriatric care, and in maximizing scarce faculty resources.

This annotated bibliography provides a ready reference to literature and websites on interdisciplinary team training in geriatrics and gerontology, to assist faculty in the development, implementation, and evaluation of interdisciplinary team training programs.

This bibliography was developed by the Work Group on Interdisciplinary Team Training of the Partnership for Health in Aging (PHA), a loose coalition of over 25 organizations representing health professionals who care for older adults. The PHA was convened to identify ways in which organizations can work together to advance the IOM report recommendations and to improve the capacity of America’s healthcare workforce to provide quality geriatric care.

For questions on the PHA or suggested additions to this bibliography, please contact Zhenya Hurd, American Geriatrics Society (zhurd@americangeriatrics.org).
TEXTBOOKS

This text serves as a comprehensive resource for practitioners and students interested in interdisciplinary healthcare teams. It focuses on team membership and understanding how interdisciplinary teams work. In addition to providing a theoretical framework, it skillfully uses case scenarios as examples of successful and ineffective teamwork in today’s complex healthcare environment. Through discussions of communication, practical approaches, leadership and conflict, the authors guide the reader through the real-life experience of teamwork. A strength of this book is the discussion of the students’ experiences and attention to curricula and experiential aspects of learning, thus bringing together the concerns of practitioners and teachers in interdisciplinary team settings.

This text, no longer in print, is a classic in the field and has served as the handbook used to guide early efforts in team development. Based on work conducted at the University of Pittsburgh’s School of Related Health Professions, it brings together the work of several disciplines in an effort to formulate a conceptual framework for the interdisciplinary team. It is comprehensive in its approach, addressing topics such as team membership, characteristics of team functioning, benefits and disadvantages of team-related treatment, and organizational setting. It also addresses team development processes, barriers, and ways to enhance team performance.

This text provides the most comprehensive review of instruments used to evaluate team functioning in the existing literature. It is organized in two parts. Part One is conceptual and theoretical and sets the stage for understanding teamwork and exploring ways to evaluate a variety of teams. Part Two is methodological; it discusses and critiques multidimensional measures of team performance. The text’s strength lies in its comprehensiveness and rigorous assessment of the tools included. It is useful to both academia and practice with information related to team performance, including education and consultation, with the intent to understand and improve team performance.

This is the “bible” on teamwork, especially in the business and consulting world. Excellent resource on virtually all aspects of teams, including how high-performing teams function.

Very entertaining, truly in fable format. Although the constructs have face validity, it’s not clear how grounded the concepts are in research. Includes a diagnostic for teams, but the focus is negative (i.e., on the dysfunctions) rather than positive functioning.


One of the classic books on process consultation/facilitation for professionals.


One of the classic books on process consultation/facilitation. Most consultants would have this reference in their library and be quite conversant in the concepts.


This book describes a large team initiative sponsored by the John A. Hartford Foundation focusing on the experience of thirteen universities and healthcare organizations developing innovative programs to educate and train health personnel and students to work in geriatrics interdisciplinary teams. To date, this initiative was the largest commitment to team training and development outside of government-sponsored programs. It offers a very practical approach to team training and development outside of government-sponsored programs. It addresses setting up a team training program, developing a specific curriculum, and examining the challenges of teamwork in different organizational environments. The appendices offer specific examples of resources for team training and assessment.


Presents factors for successful teams, backed by research; very research-oriented text.

**BOOK CHAPTERS**


This chapter provides an historical overview of the development of healthcare teams throughout the 20th century. It traces teams from earliest practice models to comprehensive interdisciplinary approaches used today. It addresses both clinical and education approaches and discusses opportunities for future efforts.

This paper provides a framework for understanding the experience of interdisciplinary geriatric teams in educating a variety of healthcare professionals and providing health services to an aging population. It focuses on state-of-the-art interdisciplinary education in geriatrics and making recommendations for the future. Recommendations address education, practice and research.


This lecture was published in the proceedings of a conference sponsored by the University of Iowa in collaboration with the Association of Academic Health Centers, focused on the interface between interdisciplinary health professions education and community-based patient care settings. Hirokawa offers an exceptionally fine scholarly discussion of interdisciplinary and multidisciplinary teams. Several arguments are presented: conceptual differences between the two different approaches exist; the nature of team members’ interactions determines whether the team functions as a multidisciplinary or interdisciplinary team; and most teams function at the multidisciplinary level because it is difficult to attain the level of interdependence, collaboration, and dialogue necessary to integrate the multiple perspectives of team members into a unique common perspective. This article should be mandatory reading for any group initiating a team approach to healthcare education or practice.


Interdisciplinary teams are a particularly appropriate way to organize health care for geriatric patients, who typically have complex, chronic problems / the interdisciplinary team provides care in which several disciplines coordinate assessment and treatment so that problems can be dealt with consistently and comprehensively / interdisciplinary teams are characterized by a nonhierarchical organization in which responsibility for the effective functioning of the team is shared by all team members / this requires that team members be excellent representatives of and advocates for their disciplines / it also requires that team members have training in team theory, leadership skills, and communication skills, including conflict resolution skills [suggest that] interdisciplinary teams are committed to the idea that patients will be best served when their care is coordinated and provided by team members who learn from each other, rely on each other, and are willing to challenge each other when appropriate / interdisciplinary teams require the wise and creative integration of diverse viewpoints and function best when team members value diversity, remain cohesive when viewpoints conflict, and negotiate agreement to which all team members are committed.
ARTICLES


Describes the origins and development of interdisciplinary healthcare teams in the U.S.


Discusses the phases of encounter groups; concepts should generally apply to work groups. Bennis is an extremely well-known management psychologist, who is also well-respected in the business world.


Editorial advocating for collaborative efforts between gerontology and geriatrics research and practice.


Examines professional communication practices in long-term care facility interdisciplinary team meetings, including giving report, writing report, and collaborative discussion.

Browne CV, Braun KL, Mokuau N, McLaughlin L. Developing a multisite project in geriatric and/or gerontological education with emphases in interdisciplinary practice and cultural competence. *Gerontologist* 2002;42(5):698-704.

Describes the conceptualization, implementation, and evaluation of a two-year, multi-site curriculum development project aimed to increase the pool of professionals trained in geriatric and/or gerontological social work.


Asserts important considerations in the development and implementation of interdisciplinary team training based on the Rhode Island Geriatric Education Center (RIGEC), including defining team membership, coping with change within the health care system, understanding individuals and systems under stress, and defining the objectives of team training.


Explores the fundamental difficulties of developing and sustaining interdisciplinary health professions programs in higher educational settings.
Clark PG. The devil is in the details: The seven deadly sins of organizing and continuing interprofessional education in the US. *J Interprof Care* 2011;25:321-327.

Using a metaphor of the seven deadly sins (lust, pride, greed, gluttony, envy, sloth, and wrath), this paper discusses both things that should not be done (sins of commission) and those that should be done but are not (sins of omission) to create successful and sustainable interprofessional education programs.


Describes a transtheoretical model (TTM) of institutional change as a comprehensive framework of the stages, processes and forces that can facilitate and maintain change in support of interprofessional education.


Advocates for the use of both quantitative and qualitative data in evaluating geriatric interdisciplinary team training and functioning.


Investigates the effectiveness of a multiyear geriatric interdisciplinary team training program. Results indicate that a critical amount of training is necessary to result in positive changes in team skills and attitudes toward geriatric health care teams. In addition, maturity, practical experience, and prior formal training in geriatrics are important in determining the effectiveness of geriatric interdisciplinary team training.


Describes the findings of a systematic review conducted to summarize the evidence for interdisciplinary education of undergraduate health professional students.


Presents the recommendations by the Task Force on Resident Training in Geriatrics Interdisciplinary Team Care of the American Geriatrics Society Education Committee on residency curriculum development in geriatrics interdisciplinary team care.


Describes the roles of members of interdisciplinary teams caring for frail older adults and the challenges such teams face in delivering care.

Summarizes research that uncovers what emotional intelligence at the group level looks like, and how to achieve it to accomplish much of the important work in organizations that is done in teams.


Describes a program designed to implement collaborative, community-based care among providers not located in the same clinic. The goal of this program was to improve or maintain the health status of high-risk community-dwelling patients, with a focus on improving medication use.


An editorial that advocates for more interdisciplinary research; defining the concept and addressing the need for an ecological context in the study of what it means to grow older. This study examined medical students' interest in geriatrics: Are knowledge, positive attitudes, and prior experience with older adults associated with an interest in geriatric medicine? Findings suggest that interventions to increase the number of geriatric-oriented physicians should focus on influencing learners' attitudes through experiences in the care of older adults.


Examines the impact of an interdisciplinary training program on knowledge and attitudes of learners from four health care programs: medicine, pharmacy, social work, and nursing. Results demonstrated that a short-term interdisciplinary education intervention (n=62 learners) can have an impact on learners' knowledge of and attitudes toward older adults, and improve their understanding and confidence in participating in an interdisciplinary collaborative care team.


Describes the development of the Test of Geriatric Interdisciplinary Care Planning (TGICP), which is an instrument used to test trainees’ ability to develop an interdisciplinary plan of care.


Summarizes the GITT programs, in which 1,341 health professions students were trained in interdisciplinary geriatric care. Results demonstrated improvement on all measures of attitudinal change, no change on a geriatric care planning measure, and a change in some of the questions on the test of team dynamics that varied by discipline. Changes
were greatest for all the attitudinal measures, with the self-reported Team Skills Scale indicating the most significant change—across medicine, nursing, and social work trainees.


In 1997, the John Hartford Foundation funded eight programs nationally to create Geriatric Interdisciplinary Team Training (GITT) programs. Faculty trained 1,341, health professions students. This paper presents the results of the evaluation, including presentation of new measures developed to assess interdisciplinary knowledge. The implications of the program as a model of the interdisciplinary education are discussed.


Operationally defines qualitative aspects of geriatric interdisciplinary team training using concept mapping.

Howe JL, Sherman DW. Interdisciplinary educational approaches to promote team-based geriatrics and palliative care. *Gerontology & Geriatrics Education* 2006;26(3):1-16.

Discusses educational approaches, including didactic and clinical opportunities, to interdisciplinary team-based geriatric and palliative care.


Based on the experience of the national Geriatric Interdisciplinary Team Training (GITT) Program, presents an overview of the necessary team skills for social workers, educational methods for teaching teamwork developed at the GITT sites, and some teaching challenges.


Describes the Trainee Test of Team Dynamics as part of the Geriatric Interdisciplinary Team Training (GITT) program. This instrument assesses several aspects related to team effectiveness and consists of a five-question written test designed to capture GITT trainees’ knowledge of team process and skills in addressing conflict among interdisciplinary team members.


Provides the results of an exploratory study of research mentorship in the context of interdisciplinary geriatric research. Based on information gathered from seven U.S. universities
that have received enhanced resources for building interdisciplinary geriatric research centers, the policies, programs and structures implemented to support research mentorship at these centers; barriers encountered in this process; and strategies for overcoming them are described.

Summarizes a training initiative in the PACE program, exposing medical residents to a model of interdisciplinary coordinated care. Results indicated that residents have generally been unaware of the services available to older adults and of the opportunities for coordinated care using the expertise of multiple disciplines. There is a lack of knowledge of key non-physician professional roles. The expanded use of PACE models as training sites could be beneficial in preparing future health care professionals for interdisciplinary team care.

To determine the attitudes of second-year post-graduate (PGY-2) internal medicine or family practice residents, advanced practice nursing (NP), and masters-level social work (MSW) students toward the value and efficiency of interdisciplinary teamwork and the physician's role on the team, a baseline survey was administered to 591 Geriatrics Interdisciplinary Team Training (GITT) participants. Most students in each profession agreed that the interdisciplinary team approach benefits patients and is a productive use of time. Although students from all three disciplines were positively inclined toward medical interdisciplinary teamwork, medical residents were the least so. Exposure to interdisciplinary teamwork may need to occur at an earlier point in medical training than residency.

Reviews the literature from 1985 to 2004 on intervention studies that compare team with usual (non-team) care; intervention studies that examine the impact of team redesign on team effectiveness; and field studies that explore relationships between team context, structure, processes, and outcomes.

Describes the Columbia Cooperative Aging Program (CCAP) which is a program to foster geriatric training for medical interns.

Describes the benefits and challenges of geriatric interdisciplinary team training and outlines training techniques to overcome those challenges, including case studies,
standardized patients, cross-discipline role-playing, glossaries, and use of the DISC Personality Profile of Human Behavior.


Compares the geriatric competencies specified by geriatric-certifying bodies of five healthcare professions: dentistry, medicine, nursing, pharmacy, and social work. Overlap and differences in geriatric competencies across disciplines are presented, and opportunities and barriers to interdisciplinary geriatric education are discussed.


Describes a voluntary service-learning program in which interdisciplinary teams of graduate level health professional students provide monthly home visits to isolated, community-dwelling elders with complex medical and social issues, mentored by clinical faculty. The authors report the qualitative and quantitative results from our program evaluation demonstrating an effective, service-learning model that compliments curricula, is satisfactory to students, and is a vehicle for academic institutions to serve elders in the local community.


The American Geriatrics Society position statement on interdisciplinary care of older adults.


Examines the association between PACE interdisciplinary team functioning and the risk-adjusted health outcomes of frail elderly individuals participating in the program in primary, acute, and long-term care settings. Results indicate that team performance was associated with significantly better short- and long-term functional outcomes.


Describes the outcomes of the RAND/John A. Hartford Foundation first round of Building Interdisciplinary Geriatric Health Care initiative which occurred between 2002-2005.


Reports the findings on interdisciplinary team membership of 817 direct-service gerontological social workers.
Reviews the literature on the effectiveness of interprofessional education programs.

Summarizes relevant literature on interprofessional team training programs.

Examines the influence of disciplinary split as a potential barrier to implementation and operation, and possibly effectiveness, at the first eight Geriatrics Interdisciplinary Team Training (GITT) programs, an initiative of the John A. Hartford Foundation to strengthen geriatric interdisciplinary team training.

Discusses four organizational factors necessary for the establishment of a geriatric interdisciplinary team training program: 1) organizational readiness to implement geriatric interdisciplinary team training; 2) partnerships between academic and clinical organizations; 3) institutional support; and 4) administrative and organizational structure.

Explores the opportunity for residents to attain core geriatric competencies in an interdisciplinary Geriatric Evaluation (GET) clinic in a small Midwestern city associated with a community-based medical school, staffed by an interdisciplinary team consisting of a geriatrician, gerontological nurse specialist, and social worker. Residents, medical students, and nursing students are frequent participants. Descriptive data indicate that the clinic experience addresses the resident core competencies set forth by the American Geriatrics Society. The GET clinic provides a unique interdisciplinary educational opportunity. Further investigation is needed to determine if residents who participate do attain core competencies.

Saltz CC. Promoting skills in evaluating interdisciplinary geriatric teams.  
*Gerontology & Geriatrics Education* 1996;16(4): 79-90.
Describes the components of interdisciplinary team care and the extent to which patients and their family caregivers are involved in the functioning of teams providing care. A model detailing each highlighted component of team functioning is presented. The integral roles of patients and their caregivers within teams are emphasized in terms of the impact on team functioning.

Seminal article in the social work literature documenting needs for role delineation and outcome measures on team effectiveness.


Provides scientists and leaders involved (or interested) in interdisciplinary research with a model that has effectively promoted interdisciplinary research as well as with some key lessons learned from two phases of the Building Interdisciplinary Geriatric Health Care Research Centers initiative.


Describes the absence of adequately trained social workers to meet the health and social service needs of the aging population, and articulates a model to upgrade the gerontological knowledge and skills of field social workers to become functioning members of the emerging modality—the interdisciplinary care team. Barriers to interdisciplinary understanding and the factors necessary for interdisciplinary collaboration are detailed.


The convergence of a number of disparate factors has led to opportunities to help address the mental health needs of older adults in primary care (PC) or "integrated care" settings. Older adults are disproportionately high users of health care resources, and cost projections for coming decades have catastrophic implications. Elders shun mental health services, instead turning to their personal physicians when troubled. The PC system is clogged with patients without medical problems or whose medical conditions are exacerbated by psychosocial factors (estimated at 60% to 70%), resulting in overutilization of services and high costs. However, PC physicians detect and adequately treat or refer only 40% to 50% of patients with mental health problems. Early experience with brief and/or structured interventions in PC settings is promising and suggests opportunities for multidisciplinary team geriatric practice.


Describes a process model used to create an interdisciplinary gerontology-education program for online delivery at Florida Gulf Coast University.


Classic article describing the four stages of groups (forming through performing).


Presents the design and development of a long-distance course on geriatric interdisciplinary teaming.

Describes a summer faculty development program aimed at enabling educators to integrate gerontology and geriatrics into health care curricula at institutions of higher education throughout Oregon. Reports on an evaluation of the program’s first four years. Results showed that the number of courses and clinical training experiences covering geriatric content had increased; and a ripple effect occurred, with the trainees themselves training a large number of students, peers, and laypersons on a variety of geriatric/gerontological topics.


Addresses the difficulty found in team-care training programs for health professionals in fostering effective attitudes and skills. Assessing team learners from four disciplines; internal medicine residency, advanced practice nurse, social worker, and pharmacy students, the study identified barriers to success, including: 1) negative baseline attitudes toward interdisciplinary team care, especially among medical residents; 2) unrecognized assumptions and behaviors by learners regarding authority and power relationships within the team; and 3) specific concerns by learners regarding the effectiveness and efficiency of health care teams.


Describes a three-year program to teach skills in interdisciplinary care to learners from internal medicine, social work, pharmacy, and nursing in a geriatrics clinic at a major academic institution in the US.

PERIODICALS

*Journal of Interprofessional Care* (UK) ISSN 1356-1820
Published by Informa Healthcare, 1984-present
Indexed in Medline, Excerpta Medica, ProQuest, PsycInfo, Social Services Abstract, etc.

The vehicle for worldwide dissemination of experience, evidence, policy, theory, and values informing collaboration in education, practice and research. To see issue table of contents: [http://www.ingentaconnect.com/content/apl/cjic](http://www.ingentaconnect.com/content/apl/cjic)

REPORTS

See Chapter 4 on The Professional Health Care Workforce: Interdisciplinary Team Training, p. 159-160.

This report reviews theoretical and practical issues of providing integrated health care to geriatric populations, interdisciplinary collaboration in diverse sites of geriatric care, and eight principles of integrated health care.


**WEBSITES**

http://caipe.org.uk  
The Centre for the Advancement of Interprofessional Education (CAIPE) is dedicated to the promotion and development of interprofessional education in the UK and overseas.

http://www.eipen.eu/  
The European Interprofessional Education Network (EIPEN) in health and social care aims to develop and sustain a network in the EU to share and develop effective interprofessional training curricula, methods and materials for improving collaborative practice and multi-agency work in health and social care.

http://hartfordign.org/education/gitt/  
The Geriatric Interdisciplinary Team Training (GI TT) Program offers educational products and implementation assistance to help programs adopt team training. The GITT Resource Center also offers links to team training materials developed at academic medical centers around the country.

http://www.jhartfound.org/program/interdisciplinary_training.htm  
Information on programs funded by the John A. Hartford Foundation to advance geriatrics interdisciplinary training, models of care, and research.

http://www.nagec.org  
The National Association of Geriatric Education Centers consists of GECs currently funded by the Bureau of Health Professions under Title VII of the Public Health Service Act. The GEC Clearinghouse of resources produced by GECs throughout the U.S., at http://coa.kumc.edu/gecresource/ is currently hosted by the Central Plains GEC at the University of Kansas Medical Center.
http://www.nappractice.org

The National Academies of Practice (NAP) site contains reports on interdisciplinary care, and a NAP Policy Paper on Accountable Health Systems, which calls for a broader interdisciplinary approach to system design.

http://www.pogoe.org

The Portal of Geriatric Online Education (POGOe) is a free public repository of a growing collection of geriatric educational materials in various e-learning formats, including lectures, exercises, virtual patients, case-based discussions, simulations, as well as links to other resources. Many resources address interdisciplinary team training. Products include those developed by the Donald W. Reynolds Foundation grantees to strengthen physician education in geriatrics.

http://libraries.rbhs.rutgers.edu/rwjlbweb/meg/cte/clinical_education/clin_team_teaching.html

The University of Medicine and Dentistry of New Jersey Center for Teaching Excellence Clinical Education Section on Team/Interdisciplinary Teaching, with 24 resource links including a bibliography on interdisciplinary education.

The Partnership for Health in Aging Workgroup on Interdisciplinary Team Training

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