

Models of Care and Inter-Professional Care Related to Complex Care of Older Adults

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Background

Teams are often used to manage the care for older adults due to their complex healthcare needs. Increasingly the added value of teams in clinical practice relates to the assessment and management of older adults with complex illness who concurrently experience multiple geriatric syndromes such as delirium, falls, urinary incontinence and polypharmacy.

Typically, interdisciplinary teams are defined as individuals from at least two different disciplines who coordinate their expertise to deliver care to patients (Farrell, Schmitt, & Heinemann, 2001; Level of Evidence: Level VI: Expert Opinion). Clark and Drinka (2000; Level of Evidence: Level VI: Expert Opinion) define an interdisciplinary team in a similar way; however, they add that interdisciplinary teams work together as an identified unit or system. Where they function as a unit, team members communicate with one another regularly about the care of the patient (group of patients) as well as take on other participatory roles. In effective teams, members pool their expertise so that patients receive better care; by working together, the work can be done more effectively and efficiently (Clark and Drinka, 2000; Level of Evidence: Level VI: Expert Opinion).

While definitions of teams are generally consistent, the terminology related to teams is often inconsistent. The term interdisciplinary and multidisciplinary are often used interchangeably when two or more disciplines are involved. These terms can have a wide range of meanings, from individuals who have direct contact with one another to individuals who have been involved in the same care at different times in the assessment and treatment process without their efforts being coordinated. The term “interdisciplinary” implies interaction or collaboration (Schofield & Amodeo, 1999; Level of Evidence: Level VI: Expert Opinion) on some level, while multidisciplinary implies many disciplines involved in the care of the patient, but not necessarily interacting with one another. A newer term, interprofessional is somewhat limited in scope, since a team may consist of healthcare personnel other than healthcare professionals, such as nursing assistants and community support personnel, and consensus is lacking as to which disciplines are considered professional as well as which category of personnel fall into the category of professionals (Clark & Drinka, 2000; Level of Evidence: Level VI: Expert Opinion).

Benefits of a Team Approach

There are many benefits of an interprofessional team, both for professionals as well as for the patient. Benefits for professionals include the development of a cooperative mindset, heightened awareness and appreciation of one’s own contribution to their discipline as well as an enriched respect for coworkers’ opinions and expertise (Clark & Drinka, 2000: Level of Evidence: Level VI: Expert Opinion). Teams are especially helpful when dealing with complex patients, as they can relieve the burden of treatment for the staff and offer greater objectivity than a single staff member working alone. For the patient, teams increase access to care and to the services of a variety of different practitioners.

Not all patients and patient care situations require teams however. While an effective team can quickly assess a situation, decide what professionals need to be involved and work closely together to reach an effective solution, many times, assigning a team to a project is not the best choice or utilization of healthcare resources. Some tasks

are completed more efficiently if assigned to one person who has the knowledge, time and experience to do the task independently. Triaging when to use a team allows for appropriate use of an expensive resource (I do not understand this sentence). Decisions as to when a team should be used are dependent on a clear understanding of each team member's unique role within the team and the team's overall purpose. Use of interdisciplinary teams is endorsed by several national organizations, including the American Geriatrics Society (AGS, 2006) and accrediting bodies such as the Joint Commission on Accreditation of Healthcare Organizations (JCAHO, 2000). JCAHO requires evidence of interdisciplinary collaboration in hospitals, nursing homes and outpatient settings as part of its accreditation process (Kohn, Corrigan, & Donaldson, 2000; Level of Evidence: Level VI: Expert Opinion).

Team Processes

Teams do not just happen; they evolve and are a work in progress, so to speak. Putting people together in a room and calling them a "team" does not necessarily constitute a healthcare team or result in effective teamwork. Administrators and other healthcare leaders may believe in the concept of a team, but fail to offer substantial support to the team in terms of recognition of their work or release time. As an evolving unit, teams pass through specific predictable phases as they form and begin their work. Teams can move back and forth between the different phases, as can the members. Clark and Drinka (2000 Level of Evidence: Level VI: Expert Opinion) describe five different phases of team formation: forming, norming, confronting, performing and leaving. Forming is ideally the phase which identifies team goals, roles and team members' personal professional attributes. Unfortunately, in many settings, Phase 1 does not occur; rather, individuals are placed together in a team and expected to begin work immediately. Norming is the phase where the team develops its goals and sense of purpose. Confronting is the phase where conflicts that might have initially been suppressed surface. Performing is when the team is effective, efficient and creative; this is the team at its best. Leaving is the last phase, when the team disbands or individuals leave the team.

Evaluating the purpose of the team helps define its usefulness. Sometimes the purpose of a team is to meet regulatory requirements (such as in the nursing home); other times it is to directly benefit the patient. Team composition varies among practice settings, and an important task of a team is deciding which disciplines should be represented and whether all of the disciplines need to be standing members of the team or can be "ad-hoc" members, invited to join when specific expertise is needed. There is no consensus as to member type or number to comprise a team (AGS, 2006; Level of Evidence: Level VI: Expert Opinion).

Aspects of Team Effectiveness

Team effectiveness is highly dependent on support from the healthcare organization. Teams need to understand the mission of the healthcare organization, and team objectives need to align with the organizational mission. While the team needs to manage itself, administration needs to be responsive to a team's request for help. Team members need to feel that their work is useful. Personal characteristics of team members, including age, gender, culture and communication styles, impact how well a team works together and how quickly and efficiently it accomplishes its objectives. Attitudinal and cultural traditions of the different professions also impact how individuals perform in a

team (Leipzig et al., 2002; Level of Evidence: Level VI: Expert Opinion) and can be obstacles in designing interdisciplinary team training experiences as well (Reuben et al., 2004; Level of Evidence: Level VI: Expert Opinion). Team members' lack of understanding the roles of other disciplines can be problematic in that often one discipline is not familiar with the roles and responsibilities of other disciplines, even though they might work side-by-side.

Effective communication is essential for both team members and the team leader. The Joint Commission of Accreditation of Healthcare organizations (JCAHO) cites effective communication as the most important aspect in reducing medical errors (Kohn et al., 2000; Level VI: Expert Opinion). Learning how to give feedback and share opinions are essential to a successful team process. Active listening, seeking clarification and "thinking out of the box" are all important team communication techniques.

In the patient care setting, the RN brings the perspective of the direct care provider to the team. The RN may have the best assessment as to the patient's functional and mental status, ability to complete Activities of daily living (ADL) and instrumental activities of daily living (IADL) such as medication administration (for more information visit www.GeroNurseonline.org and select Geriatric Topics: Function). The advanced practice nurse (nurse practitioner and clinical nurse specialist) brings additional skills to the health assessment of the older adult such as health promotion activities, ordering, conducting and interpreting diagnostic testing data, clinical management, education and other important aspects of care management.

Outcome of Team Care for Older Adults

Although the *empiric* evidence-based research about specific contributions of a team to particular clinical situations faced by older adults is growing, care of the older adult with complex needs is predicated upon interdisciplinary collaboration (AGS, 2006; Level of Evidence: Level VI: Consensus Expert Opinion). Studies as to team effectiveness are difficult to conduct due to the many variables, including patient complexity, inconsistent terminology used to describe teams, (Schofield & Amodeo, 1999; Level of Evidence: Level VI: Expert Opinion) and the confounding data when the team is part of a larger intervention. Nevertheless, expert opinion consistently cites teams as beneficial in the care of older adults with complex and multiple comorbidities and older patients with geriatric syndromes, as well as in reducing healthcare costs (Mion, Odegard, Resnick, & Segal-Galan, 2006; Level of Evidence: Level VI: Expert Opinion; AGS, 2006; Level of Evidence: Level VI: Expert Opinion).

Strong evidence supports the effectiveness of interdisciplinary team care in a variety of settings, including acute care (Douglass, 2001: Level of Evidence: Level I: Systematic Review), subacute care (Andrews, Kaye, Bowcutt, & Campbell, 2001: Level of Evidence: Level V), (Schultz, 2001; Level of Evidence: Level II; RCT) and home care (Stuck, Egger, Hammer, Minder, & Beck, 2002: Level of Evidence: Level I: Systematic Review; Beltz, 2000; Level of Evidence: Level II).

Interdisciplinary teams have proven to be effective for older patients with specific diagnoses or syndromes, including hip fracture (Cameron, Handoll, Finnegan, Madhok, & Langhorne, 2001; Level of Evidence: Level I: Systematic Review; Cameron, 2005; Level of Evidence: Level II: RCT) and delirium (Britton & Russell, 2006; Level of Evidence: Level I: Systematic Review). Evidence is less strong in team effectiveness for older people with depression (Slimmer, 2003; Level of Evidence: Level VI: Expert

Opinion), palliative care needs (Lloyd Williams & Payne, 2002: Level of Evidence: Level VI: Expert Opinion) and dementia (Warchol, 2004; Level of Evidence: Level V),. In all of these situations, it is difficult to determine whether the interdisciplinary team, the multiplicity of services offered or collaboration in general accounted for the positive patient outcomes.

Examples of Effective Geriatric Teams

Many geriatric models of care involve teams. In some of the models, the teams are made up of individuals from one discipline and in others, are interdisciplinary. Table 1 provides a description of some of the different geriatric care models and the nature of the team.

One model of hospital care that has demonstrated positive outcomes from interdisciplinary teams is the Acute Care for the Elderly Unit (ACE). Interdisciplinary collaboration is a distinguishing feature of ACE Units (Landefeld, Palmer, Kresevic, Fortinsky, & Kowal, 1995; Level of Evidence: Level II: RCT). Other features include environmental adaptations for older adults, patient centered care and staff with special expertise in the care of older adults (Palmer, Counsell, & Landefeld, 1998; Level of Evidence: Level II: RCT). While some studies are equivocal, there is generally strong evidence that ACE units improve the short-term functional outcomes of the inpatients that they serve (Landefeld et al., 1995; Level of Evidence: Level II: RCT).

Clinical Case Scenarios Likely to Benefit from a Team Approach

Simple problems don't require team solutions. Teams are most useful for problems that can only be solved when people with different skills and perspectives work together towards a common goal. Patients with complex physical and cognitive programs and with geriatric syndromes such as falls or depression that are multifactorial in origin often benefit from team interventions. Similarly, teams can be useful in addressing system issues, such as reducing falls or the use of physical restraints. In order to appreciate the types of clinical situations and input offered by interdisciplinary teams, consider the following case examples. In each, envision your role as a practicing registered nurse.

Case one: Managing a patient with behavioral disturbances in a hospital setting

Mr. R is a sixty-eight-year-old man admitted to the hospital from a psychiatric facility, with a new onset of pneumonia. Mr. R speaks only Spanish. He has a history of progressive dementia, probably multifactorial. His family alleges that the psychiatric facility has abused him and will not allow Mr. R to return to the facility. In the hospital, his pneumonia rapidly responds to antibiotics, but, as he becomes more alert, his behaviors become more erratic: he often resists care, pulling off his clothes and defecating on the floor; he wanders into other patients' rooms; and he reacts violently and unpredictably at times, despite staff attempts to use distraction and other behavioral techniques. Although psychiatric consultation has been assisting with medical management, he still requires one-to-one observation, and no nursing facility will admit him because of the risk of harm to others. Staff is frustrated. The nurse manager from the unit he is on has asked you, his primary nurse, to serve on a team to try to deal with this dilemma. In considering the construction of such a team, the manager has considered several questions before proceeding with this task, for example,

- 1) What are the issues that the team will need to discuss?
- 2) Who should be a member of the team and why?
- 3) How often should the team meet?

Issues requiring discussion include general care issues for Mr. R, such as, ensuring that his ADL and IADL needs are met (e.g., the need to be clean, dressed and take sufficient nourishment, including fluids); identifying causes for his behaviors (e.g., medications, pain); using effective behavioral techniques and better, safer psychoactive medication; planning for discharge, including a further understanding as to the specifics of the family's claims of abuse; and family counseling to enlist their help in managing the patient or choosing facilities.

Understanding the purpose of the team before determining its composition is a critical first step. Once the issues are clarified, the nurse must consider the composition of the team. Typically, a team in a hospital might include the core providers: a staff nurse, social worker, geriatrician or primary care physician and/or psychiatrist, as integral team members. In other instances it is helpful to include family members, nurses' aides, and other nursing disciplines such as a gerontologic nurse practitioner or a mental health clinical specialist, occupational therapist or music therapist. In some cases, representatives of the hospital ethics committee may be invited.

Teams assembled to solve clinical problems in the hospital setting usually meet once to develop a plan of care and often again within a week to assess its effectiveness. Although informal phone calls or brief chats among team members often occur in the course of work and can provide important feedback to team members, formalized team meetings should continue until a successful plan of care is implemented and the patient is discharged safely.

Case two: Assembling a team to discuss a homebound patient.

Mrs. S is an eighty-six-year-old woman who was recently discharged from the hospital after a fall. She lives alone and her daughter, who calls her daily, lives out of town. Since discharge, Mrs. S has been receiving home nursing and physical therapy; a home health aide comes three days a week for four hours. Mrs. S has not left her apartment since returning home. She says that she is afraid of falling again. You are her home health nurse and, on one visit, you find Mrs. S still in her nightgown, and she says that there was no point in getting dressed. You speak to your supervisor about your concerns. He suggests that you speak with the other caregivers and professionals who know Mrs. S to try to determine a plan of care.

- 1) Who are the essential team members?
- 2) How can you establish effective communication and cooperation?

As exemplified in this clinical case example, it is very likely that you are the first to recognize a potentially serious problem (possibly major depression) that would benefit from input from diverse caregivers and family members. Home care represents an especially challenging venue for teams because of the temporal and physical distances between parties; professionals typically do not work in the same setting and rarely have

face to face meetings. Therefore, convening a team meeting may mean communication using fax, email and telephone conferences and messages. With this in mind, it is still important to approach convening of the team as you would any other, beginning with the issues at hand and then determining who should be on the team. Developing a problem list is often helpful. First, identify the basic issues to be addressed—in this case, a woman who is physically and socially isolated and who may be depressed. Next, identify the key players or constituents of the team—in this case also considering how the team members will work together. Options for meetings might include convening in the physician's office or patient's home; using cell phones from the home, conference calls, email or other forms of electronic communication; or single calls to individual providers coordinated by the nurse. Further, there is a need to consider how observations and changes to the plan of care should be documented and what the role of each team member should be in recording the plan of care and its implementation.

Case three: Addressing a systems problem

As a staff nurse, you are concerned about the high use of restraints on your unit, and you are asked by the nurse manager to create a Continuous Quality Improvement (CQI) committee to investigate and reduce restraint use.

- 1) Who belongs on the committee, and why?
- 2) Who should lead the committee?
- 3) How should the committee be managed?

The problem under discussion is not an individual patient but a pattern of care—in this case, restraint use. Committee members may include representatives from all levels of nursing such as nursing assistants, staff nurses, nurse managers and nursing administrators. The committee should also include representatives from internal medicine, pharmacy, psychiatry, environmental services and physical and occupational therapy. Other contributors might include patient representatives or community advocates, legal services and scholars with expertise in restraint reduction.

After determining team composition, it is helpful to think broadly about unique and shared team responsibilities. When considering if a nurse should lead the team, consider what training and qualities are necessary for this leadership role. The third question entails the logistics of running a team, such as where and how often meetings should be held; the other roles in a team, such as timekeeper and recorder; whom the team leader reports to; how team recommendations can be implemented and evaluated; and lastly, when a team should disband.

Summary and Conclusions

Interprofessional teams have demonstrated their importance in maximizing positive outcomes for older adults across the continuum of care. In particular, they offer added value to the assessment and management of the older adult with complex illness. Understanding team process, the specific roles of team members and when teams can be beneficial in the care of an older adult are germane to all practice settings serving older

adults. Every practicing nurse should think critically about the necessary components of an effective geriatric team, the team's role within the healthcare organization and the benefits team care can afford to the older adult patient with complex needs.

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Table 1 Geriatric Care Models

Model	Description	Setting	Team Members	Type of Team
Acute Care for the Elderly (ACE)	A special inpatient unit in the acute hospital setting. Key elements include a physical environment designed to foster functional independence, multidimensional assessment linked to treatment aimed at maintaining cognitive and physical functioning, medical care review to prevent iatrogenic complications, interdisciplinary team rounds and discharge planning (Counsell et al., 2000; Level of Evidence [LOE]: Level II: RCT, Kresevic et al., 1998; LOE: Level IV: Program Report; Landefeld et al., 1995; LOE: Level II: RCT).	Hospital	Nursing, physicians, social worker, case manager, pharmacy, chaplaincy (and others as determined by setting)	Interdisciplinary
Geriatric Resource Nurse (GRN) Model	Based on the premises that not all nurses have the requisite knowledge and skills to provide care for the growing number of elderly in hospitals, that primary nurses know most about the day to day patterns of their elderly patients and that primary nurses who serve as geriatric resource nurses are more likely to integrate new behaviors into practice. A geriatric clinical nurse specialist works closely with the GRN to educate and exchange ideas (Fulmer, 1991; LOE: Level VI; Fulmer et al., 2002: LOE: Level V).	Hospital	Advanced practice nurses and staff nurses	Unidisciplinary (Nursing)

Syndrome Specific Model	Consultation and education by a geriatric clinical nurse specialist to help nurses improve their accuracy and speed in identifying and managing common geriatric syndromes such as delirium, falls, urinary incontinence and sleep disturbances. This model uses a target condition to begin the comprehensive improvement of geriatric care (Milisen et al., 2001: LOE: Level IV).	Hospital	Advanced practice nurses and staff nurses	Unidisciplinary (Nursing)
Comprehensive Discharge Planning	Includes a specialized geriatric discharge planning protocol for elders and geriatric clinical nurse specialists to coordinate and plan care in the critical period after discharge. Services are provided by master's-degree prepared nurses with advanced training and clinical skills in the care of older adults. The advanced practice nurse is responsible for discharge planning while the patient is hospitalized, and then substitutes for the visiting nurse for a defined period after discharge. A key feature of this model is the ability of the advanced practice nurse in collaboration with the patient's physician to individualize patient care within the bounds of established protocols (Naylor, 2004; LOE: Level II: RCT; Naylor et al., 1999; LOE: Level II: RCT).	Hospital to Home	APNs physicians, social worker and other members of the team as needed	Interdisciplinary
Geriatric Consultation Teams	Comprehensive assessment of physical, emotional, psychological, and functional status. Team makes recommendations. Not unit based (Cohen et al., 2002; LOE:	Hospital	Geriatrician, nurses, social worker and other professionals as	Interdisciplinary

	Level II: RCT).		needed by patient	
Geriatric Evaluation and Management Units (GEM)	Prevention and management of geriatric syndromes on a designated inpatient unit. GEM units usually accept patients already hospitalized on other units who are experiencing geriatric syndromes such as falls, functional decline (Cohen et al., 2002; LOE: Level II: RCT).	Hospital	Nurses, geriatrician, social worker, physical therapy, and other professionals as needed by patient	Interdisciplinary
PACE model	PACE programs provide social and medical services primarily in an adult day care center, supplemented by in home and referral services in accordance with the patient's needs. Goal is to provide seamless care. Interdisciplinary team follows patient through all care settings (Eng, 2002; LOE: Level IV).	Community	Nurses, physicians, social workers and other professional and paraprofessionals as needed by the patient	Interdisciplinary
Nursing Home Model	Team meets quarterly to update Minimum Data Set (MDS) and plan care for residents (www.cms.hhs.gov/apps/mds/default.asp).	Nursing Home	Nurses, physician, social worker, recreation therapy, nutrition	Interdisciplinary
Outpatient Geriatric Assessment	Comprehensive assessment of physical, emotional, psychological and functional status. Team makes recommendations (Cohen et al., 2002; LOE: Level II: RCT).	Outpatient setting	Geriatrician, nurses, social worker, physical therapy, and other professionals as needed by patient	Interdisciplinary

Appendix A. References cited according to levels of evidence

Level I

Britton & Russell, 2006
Cameron, Handoll, Finnegan, Madhok, & Langhorne, 2001
Douglass, 2001
Stuck, Egger, Hammer, Minder, & Beck, 2002

Level II

Beltz, 2000
Cameron, 2005
Cohen et al., 2002
Counsell et al., 2000
Landefeld, Palmer, Kresevic, Fortinsky, & Kowal, 1995
Naylor, 2004
Naylor et al., 1999
Palmer, Counsell, & Landefeld, 1998
Schultz, 2001

Level IV

Eng, 2002
Kresevic et al., 1998
Milisen et al., 2001

Level V

Andrews, Kaye, Bowcutt, & Campbell, 2001
Fulmer, T., Mezey, M., Bottrell, M., Abraham, I., Sazant, J., Grossman, S., et al., 2002
Warchol, 2004

Level VI

AGS, 2006

Clark and Drinka 2000

Farrell et al., 2001

Fulmer, T. 1991.

Leipzig et al., 2002

Lloyd Williams & Payne, 2002

Mion, Odegard, Resnick, & Segal-Galan, 2006

Reuben et al., 2004

Schofield & Amodeo, 1999

Slimmer, 2003

Appendix B Web-based resources for Interprofessional Care Related to Complex Care
of Older Adults

www.GeroNurseOnline.org

Select: Geriatric Topics: Function

www.hartfordign.org/resources/education/GeriatricTeamTraining.html or www.hartfordign.org/index.html

Select: Team Fitness Test

Select: Team Observation Tools

www.americangeriatrics.org

Select: Position Statements

Appendix C Examples of Teaching Pedagogies for Interprofessional Care Related to Complex Care of Older Adults

<u>Content Area: Topic</u>	<u>Recommended Pedagogy</u>
Identifying necessary components of effective geriatric teams	Participate as an observer when the team makes rounds on a clinical unit. Obtain the “Team Observation Tool” by visiting and downloading the tool from the GITT core curriculum available on www.hartfordign.org/resources/education/GeriatricTeamTraining.html Using this tool, critically analyze and report the components of the team and roles of various members.
Identify the quality indicators for effective geriatric teams and elements of team cohesiveness	Select a clinical unit in the hospital, which uses a team to either assess or manage health conditions of older patients. Obtain the “Team Fitness Test” by visiting and downloading the tool from the GITT core curriculum available on www.hartfordign.org/resources/education/GeriatricTeamTraining.html Using this tool, critically analyze and report if this team approach measures up to the standards set forth in the Team Fitness Test.
Identify issues of management and important health related outcomes (patient-provider and facility-level) discussed by geriatric teams.	Select a patient from your clinical assignment who possesses a geriatric syndrome (such as urinary incontinence, falls or delirium). Using your knowledge of this patient, develop a functionally oriented problem list and plan of care that includes how this syndrome impacts on the patient, on the provider and on the healthcare organization. How does your plan of care compare/contrast to that of the geriatric team?