Arena Assessment: Evolution of Teamwork for Frail Older Adults

This article offers an approach to the assessment of frail older adults with complex needs that has been used by the University of North Carolina at Chapel Hill Program on Aging as both a care delivery and a teaching strategy. The patient is assessed simultaneously by different disciplines to develop a holistic and practical plan of care. It is termed "arena assessment," borrowing from the pediatric literature on transdisciplinary assessment of children. The article explores the benefits and limitations of this approach for patients and families, as well as for professional learners. Case examples illustrate use of the model from community-based to institutional care. Key words: aging, arena assessment, frailty, geriatric assessment, interdisciplinary, teamwork, transdisciplinary

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PROBLEMS OF FRAIL OLDER ADULTS

Professionals providing care to older adults who are frail often identify problems of fragmented care. This fragmented care

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arises from the complexity of their needs, with intertwined functional, medical, and social issues, requiring efforts from a variety of professionals. An example is Mr W, a 78-year-old male with a history of bipolar disorder, impaired cognition, chronic obstructive pulmonary disease (COPD), and congestive heart failure (CHF). His wife of 56 years died 4 weeks prior, causing him to relocate from his home in another state to live with his son, daughter-in-law, and 10-year-old grandson. In the past month the family noted marked decline in cognitive function, energy level, self-medication, gait, and ability to stay engaged in activities during the day. In addition, the family sought advice on low-cost residential settings that accept persons with Mr W's limitations. The problems to be solved in this case are best solved by a physician, nurse, social worker, occupational therapist, and physical therapist. Unless these clinicians collaborated on the evaluation and plan, each would evaluate and intervene from the vantage point of one professional domain. The process of seeing these professionals separately would have involved multiple appointments and locations, duplication of evaluation questions and tests, and multiple billings. Information to the family would likely be fragmented and conflicting.

While government regulation requires communication among disciplines, Medicare reimbursement practices have a double-edged effect on teamwork. Even when Medicare prospective payment systems (PPS) require teamwork to ensure funding for services, new issues of power and competition have left professionals and direct caregivers feeling devalued and dissatisfied with their work. To protect a reimbursable role, health care professionals are drawing

greater distinction between what they will and will not treat, or they try to capture a larger piece of the reimbursement by saying they can do it all.² Regardless of spoken beliefs about holistic approaches, in many settings "efficiency" is a division of labor rather than prioritizing the extensive care needs of frail older adults across disciplinary boundaries. Lack of continuity and follow through of interventions plagues even well-financed geriatric programs, contributing to a sense of hopelessness among many professionals, not to mention the older adults receiving the care.¹

Not only do care delivery systems and reimbursement streams inadvertently contribute to decreased teamwork, but also many academic programs do not adequately prepare health care professionals with effective teamwork experiences. Teamwork may be discussed, but rarely are interdisciplinary clinical experiences part of the core curriculum. Justified by "holistic approaches" within each profession, discipline-specific knowledge is viewed as the real education, and working effectively with other disciplines is considered peripheral, if time permits. Thus, many health care professionals never experience the power of genuine teamwork, actually reaching out to other disciplines to overcome obstacles.

In outpatient academic settings, interdisciplinary geriatric team practice appears to be decreasing because Medicare reimbursement fails to reimburse team evaluation or activities to coordinate services. In a survey within North Carolina, of the few interdisciplinary programs that existed 5 years ago, all but one has disbanded; it has reverted to sending patients to occupational therapy or physical therapy for separate evaluations and intervention plans. In calculations, the

cost to provide these separate evaluations is more than the team consultation model to be described in this article. Yet frail older adults and their families need care that takes their situation as a whole into consideration to create individualized approaches to the real problems they face.

Research on outcomes of geriatric assessment teams generally supports their value for health management and preventing institutionalization; however, findings are variable.³⁻⁸ This variability is not surprising when terms such as comprehensive geriatric assessment, interdisciplinary care, and even follow up are used to describe very different activities.9 To date, only "follow up" has been identified as a key ingredient of improved outcomes. 10 An objective of this article is to contribute to the articulation and expansion of models of assessment that will improve research on outcomes. For the purposes of this discussion of team assessment, meaningful outcomes will center around two points. First, the patient and family's primary concerns are addressed in a way that respects their concerns and values. 11 Second, findings of the assessment are accurate and useful to a practical course of action to address the concerns identified.

Two principles also guide the work of this team. First, assessment strategies should be flexible to match the needs of the patient, rather than making older adults and their families fit into the fragmented care systems that currently exist. 12 The second principle is that health care professionals should experience teamwork during their training. This is best accomplished through positive modeling in real-life practice. Students who engage in positive teamwork during their training develop essential skills for commu-

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nication with other disciplines and a vision of what an effective team can be. 13

The article begins with a review of the evolution of teamwork in health care as it has progressed to greater levels of integration, followed by a rationale and description of arena assessment with older adults. Arena assessment is the use of simultaneous evaluation by members of different disciplines to create a collaborative plan of care. That is to say that professionals from multiple disciplines are present in the room, working together in the evaluation of the patient. Benefits and problems with arena assessment emerge in the descriptions and summary.

EVOLUTION OF TEAMWORK

The evolution of teamwork in modern health care reflects broader constructs in society and medicine. ^{13,14} The unidisciplinary approach, used from the mid 19th to mid 20th century, was based on the belief that a 1:1 relationship exists between disease agents and human conditions. The centrality of the medical diagnosis persists in "latent" form today as the physician serves as "primary provider" and team leader in health care settings.

Beginning in the early 20th century the groundwork for multidisciplinary approaches was laid by concepts of multiple causality and specialization. ¹⁴ Freud introduced the idea of multiple causality through

the introduction of psychological constructs as agents of mental illness. Specialization emerged from the industrial world where Henry Ford created the assembly line, in which workers addressed single parts of the fabrication process. These two factors, along with the need to extend health care services, particularly those of nurses during World War I, set the stage for allied health professions and the construction of a division of labor within health care. Advances in knowledge and skill in each of the professions contributed immeasurably toward resolving specific problems of patients. The multidisciplinary model promoted parallel rather than collaborative care. From overuse of multidisciplinary approaches arose the legacy of fragmentation, a common dissatisfaction of patients, families, and service providers today.

Interdisciplinary approaches emerged in the mid 20th century, fueled by more complex views of human behavior and the opportunity for cooperative efforts in health care in the wake of the strenuous demands of World War II. In this model, team members draw conclusions about patient needs based on separate assessments and distinct frames of reference. Subsequently, the team exchanges information about findings, treatment, and patient progress and compiles a list of problems and recommendations. Occasionally the team achieves consensus about causal hypotheses, as they have each seen separate samples of patient interactions and behavior, even when the same question has been asked. The problem list is rarely prioritized and the outcome is usually a schedule for separate interventions to address the problems. Without a level playing field to synthesize the patient's needs, professionals with perceived power within the setting are likely to dominate the treatment plan. However, interdisciplinary care is less fragmented than with multidisciplinary approaches.

Holistic concepts in health care reemerged in the 1960s and 1970s. 13 Pediatric early intervention and special education movements spurred programs that found the multidisciplinary and interdisciplinary models developed for adults inadequate to meet complex needs of children with developmental disabilities and their families.¹⁵ Thus evolved a transdisciplinary approach to early intervention in which there is a greater degree of exchange of information and specific skills across disciplinary boundaries. Unlike interdisciplinary teams. transdisciplinary teams work more collaboratively by performing a joint evaluation and by cross-disciplinary training to carry out specific interventions. The arena assessment is used in pediatric transdisciplinary teams as it offers the greatest opportunity for integration of findings and efficient use of resources for clients with complex needs. 16-18 Fig 1 illustrates the evolution of teamwork in health care on the continuum from unidisciplinary to transdisciplinary.

Health care teams have evolved in parallel to business teams. ¹³ Highly collaborative health care teams are similar to self-directed work teams in business. Both value diversity, integration of information, group decision making, and participatory leadership. The similarities are due in part to the influence of business on health care practices.

CURRENT VIEWS OF FUNCTION

The World Health Organization has further developed the International Classification for Functioning, Disability, and Health¹⁹ (ICIDH-2) that applies to all age groups.

Key:Pt= Patient and Family, SW= Social Worker, NP= Nurse Practitioner, PT= Physical Therapist, OT= Occupational Therapist, MD= Medical Doctor

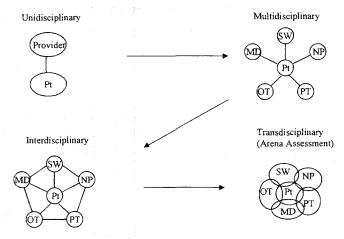


Fig 1. Evolution and continuum of teamwork.

The model, illustrated in Fig 2, reflects the most current interdisciplinary thinking about health-related function. Disability is viewed as resulting from complex interactions between health conditions, body structures and functions, activity performance, social participation, environmental factors, and personal factors. The clinical reasoning processes and knowledgebases of different disciplines are needed when there are problems in multiple areas. Those reasoning processes need to be synthesized for a common understanding of the best course of action. All disciplines should appreciate the model as a whole and offer in-depth knowledge and skill in the aspects that are central to their discipline. This model would define best practice, not only by the evidence supporting specific interventions by clinicians, but also by the degree of synthesis and collaborative planning by the team. An arena assessment allows for the most sophisticated level of synthesis of the different aspects of the model.

This brief review of the history and current thinking about function oversimplifies some key points. First, forms of teamwork are actually on a continuum of collaboration, rather than distinct forms, and even within a team, the degree of collaboration can vary between patients. Thus, teams are not locked into a linear evolution toward collaboration. In fact, the recent shift in health care reimbursement toward procedurebased billing has shifted the pendulum in favor of single providers regardless of their competence with those procedures. Second, health care around the United States has taken many forms over the years, with high and low levels of team collaboration and synthesis occurring in pockets throughout the century. Thus, the socioeconomic environment cannot be fully blamed for lack of collaboration. Yet, understanding the evolution of teamwork enables development of team approaches that align with team values and understanding of patients' needs.

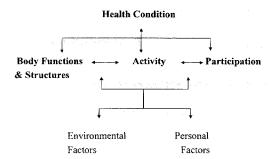


Fig 2. International Classification of Functioning, Disability, and Health (ICIDH-2). *Source:* Reprinted with permission from the World Health Organization, © 2000.

DESCRIPTION OF ARENA ASSESSMENT WITH CHILDREN

In an arena assessment the child is assessed simultaneously for a common sample of behavior from which each discipline learns key information. 16-18 For the child the assessment is a play-based experience in which parents participate and certain information and skills are elicited through naturalistic activities. For example, playing with dolls informs the physical therapist about motor development, the occupational therapist about the ability to plan and engage in a sustained task, the speech-language pathologist about communication skills, and the social worker about a pressing social issue of the child. One professional primarily interacts with the child, but others may elicit or prompt specific responses if it appears appropriate and comfortable for the child.

Each team member evaluates and contributes to the plan from his or her body of knowledge, as needs appear in respective domains of concern. Following the observation, the team discusses findings

to synthesize information on key causative factors and formulates an integrated plan. This process promotes a common vocabulary, which benefits all team members, including the child and family. The need for further assessment by a discipline may be identified. In early intervention, a primary provider and the parent implement a comprehensive plan that includes specific strategies for which the team has trained them. For children with complex needs and their families, integration and continuity are strong points of this model. Challenges of arena assessment with children lie in the capacity of individual team members for role expansion, to genuinely understand the perspectives of other disciplines, and for role release, the transfer of specific skills to other disciplines.¹⁴

To the authors' knowledge, arena assessment for older adults has not been described in the literature. It is a model used by the University of North Carolina at Chapel Hill (UNC-CH) Program on Aging (POA) clinical team to assess older adults with complex needs and their caregivers and to educate students and clinicians from many disciplines. The next sections describe the rationale for arena assessment, followed by the process and team experiences with the technique.

The term *interdisciplinary* is used in this article to characterize this geriatric assessment team, despite the fact that the arena assessment process has been described in the context of transdisciplinary care. The difference is that there is no cross-training of other disciplines to carry out specific interventions as would be done in a transdisciplinary within the context of current geriatric team evaluation is more appropriate.

RATIONALE FOR ARENA ASSESSMENT WITH OLDER ADULTS

When considering the needs of frail older adults, key issues that arise are similar to the issues of small children. Foley¹⁴ describes four principles that provide a theoretical rationale for use of an arena assessment with children. These principles are next described and applied to understanding of disablement in older adults.

First, many factors come together to create certain symptom complexes. This applies to older adulthood most simply in what are referred to as "geriatric syndromes." An example of these syndromes is someone with a gait disorder resulting from multiple causes, Parkinson's, spine osteoporosis, and left knee osteoarthritis. Hearing loss, early Alzheimer's disease, and drug effects can present as severe cognitive dysfunction. Yet another example is incontinence and learned helplessness in a person with mobility problems who lives in a poorly staffed nursing home.

Second, the individual can only be understood as a whole in the context of environmental factors. Environmental and psychosocial factors are clearly influential in the functional status of older adults.²⁰ Caregiver issues are inseparable from patient issues for frail older adults as they are for children with special needs. At all ages, the environment, as much or more than any specific impairment of the individual, defines disability.

Third, the "developmental domino theory" for children implies that different areas of development, such as cognitive and motor, influence each other. This linkage of development applies in older adulthood in the cascading effect of a problem, such as a hip fracture that can precipitate physiologic and psychosocial decline. Similarly, beneficial crossover effects in health and well-being arise from improved occupational engagement, exercise, or social support. 21,22

The fourth concept in pediatrics is that developmental disabilities result from cumulative adversity rather than a single factor or event. The equivalent occurs when older adults compensate effectively with the gradual age-associated changes in vision, hearing, musculoskeletal function, and cognitive processes.²³ A disability occurs when a threshold is reached such that the demands of tasks exceed the capacity to compensate for impairments. Common examples are when impairments in both vision and proprioception limit independent ambulation, or when motor and cognitive limitations combine to make a person unable to drive or dress.

Clinicians in geriatric care do not need parallels in pediatrics to justify a team approach to assessment. Rather, care can be improved by drawing on approaches used to solve similarly complex issues. With the proliferation of older adults as a percentage of the population there is great urgency to advance services to meet their needs, especially for those who are frail.

Despite similarities, older adults are obviously quite different from children in many ways. Adults have cumulative wisdom, life experience, spirituality, meanings, identities, and much more. These factors further support the very need for integrated care. Yet, older adults have been socialized to expect fragmented care. They do not anticipate that health care providers will view them as

people with a deeply complex system of strengths as well as problems, a rich life history, and hopes for the future.

EXPERIENCES OF ARENA ASSESSMENT WITH OLDER ADULTS

The UNC-CH POA clinical team has used arena assessment for more than a decade for purposes of interdisciplinary teaching and clinical care with particularly frail, complex older adults. These services are provided within the university medical center and in outreach to underserved areas of the state. In outreach settings in North Carolina, the team has worked with local teams in rural skilled nursing facilities and outpatient settings, in home visits, and in a geriatric prison unit. These efforts have been funded by a variety of sources including state funding to the POA, grants from the Bureau of Health Professions, Area Health Education Centers (AHECs), state agencies, and local facilities. The core team includes a geriatrician, nurse practitioner, occupational therapist, physical therapist, and social worker. These clinicians are faculty members of the university and advanced practice clinicians in their respective disciplines. Students from a variety of disciplines participate in all settings. When possible other disciplines are represented, such as speech-language pathology, pharmacy, nutrition, and psychiatry.

Arena assessment is reserved for patient and caregiver problems that they perceive to be beyond their capacity to manage effectively. Complex medical, social, behavioral, and functional issues of at-risk or frail older adults are often the explicit problem. The implicit issue is often an ethical dilemma involving views of quality of life, end-of-life

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decisions, resource allocation, or balancing safety and independence. Liability or regulatory or reimbursement constraints, if not identified at the outset, predictably arise in the discussion.

The next section describes the process of arena assessment, followed by application in the university hospital outpatient clinic, outreach to underserved areas, and home-based services. In all settings, the phases include preparation, evaluation with the patient and family, synthesis, and follow up. The team remains flexible to change session format, as unexpected issues frequently arise.

GERIATRIC ARENA ASSESSMENT

Preparation

In advance of the session, the arena assessment process is explained to the patient and family and consent is obtained. Once the process has been clearly and fully explained, most patients and families welcome the opportunity to gain consultation from a large team.

A room that is large enough to accommodate the group in a circular arrangement sets the stage for the desired interaction among participants. Equally important is a culture that assumes that all team members are valued for unique contributions professionally and personally, including students.

Prior to meeting with the patient and family, the clinical teams and student learn-

ers meet, establishing the plan for the session. A team member presents background information on the patient and family. All ask questions, and the whole group then establishes the need for further information (eg, What is the patient's social support network?), identifies new problems (eg, fall risk), and collectively responds to informational questions as possible (eg, What are the possible causes of incontinence?). Once this information is shared, an evaluation strategy is developed. Questions to be answered include:

- Should the patient and family be seen together or separately? Are there uncomfortable issues that would be better brought out in a separate meeting with the social worker?
- Who should take the lead in asking questions? Do we need a physical therapist to evaluate mobility? Are there performance issues the occupational therapist should evaluate?
- What environmental factors would be optimal for the assessment? Appropriate chair? Lighting adjustments? Arrangement of chairs and people?
- What are the key topics that should be pursued? Are there sensitive topics that should not be brought up unless the patient mentions them first?

Evaluation with patient and family

In this phase, the patient and family are made comfortable by introductions and further explanation of the purpose of the session. The process that ensues is guided by the clinical judgment of the team, held by the person who leads the assessment. In the medical context of the clinic, the physician often takes the lead, and the patient expects

to discuss medical and related functional concerns. As with all good practice, the concerns of the patient and family are drawn out in their own words. If mobility issues arise, the physical therapist may question and perform selected evaluation of the person's physical function and comfort. Adjustments to movement, such as adding a cane, may be used to evaluate potential causes and interventions. The occupational therapist asks about activity patterns and meaningful occupations in the past and present. The patient is asked to identify and perform a problematic activity to observe the patient's functioning. Impairments, such as visual or cognitive difficulties, that interfere with task performance may be explored, or noted for further assessment. The social worker pursues issues of social support, social history, resources, and psychosocial issues of the patient and family. The nurse may pursue medication management, care issues, and end-of-life wishes.

To ensure the comfort of the patient and family, each team member is introduced and moves in good proximity for the interaction. The comfort level of the patient and family is everyone's responsibility. This comfort is achieved by constructive use of body language, warm interactions, changing approaches, or stopping if necessary. Respectful interactions between clinical team members are critical to creating a favorable atmosphere. Peripheral conversations are discouraged. Even in a large group, a climate of intimacy and trust is usually achieved.

Although following the cues from the patient, family, and other disciplines is important, the sequence of questions is also significant. When possible, the initial focus is getting to know the patient as a person in

the context of his or her environment, important people, events, and occupations. Leaving specifics about the patient's medical status for a later time puts those solutions in perspective for individuals with chronic disabling conditions and delivers a message about the team's concern for the patient as a whole.

The benefits of simultaneous assessment of the patient are most clear when single questions bring about evaluative information for many disciplines. For example, the request to "describe a typical day," often thought of as in the domain of occupational therapy, is actually a question that provides evaluative information for all disciplines. Everyone learns about sleep-wake cycles and general activity levels. The physical therapist learns about the mobility, endurance, and comfort measures that are taken. The occupational therapist learns about important routines, meaningful occupations that support identity, management of energy over the course of the day, and ability to perform essential tasks in the environment. The social worker may learn about social contacts or isolation, as well as support networks. The nurse practitioner may learn about health monitoring, such as glucose checks, and the effect of health problems on lifestyle. The pharmacist, nurse, and physician learn about the occurrence of other symptomatology that may contribute to diagnosis of health conditions and secondary medication effects.

Flexibility of format is essential. At times the family meets separately with the social worker and certain other team members. This allows opportunity for the family to share concerns, longstanding problems, or sensitive information that they do not want to share in front of the patient or with the

larger group. Caregiver burden, long-term care placement, alcohol abuse, physical and psychological abuse, cognitive decline, and neglect are important issues that sometimes arise more freely with the family and patient seen separately. Similarly, the patient has an opportunity to express concerns. Getting these underground issues out in the open during the assessment phase enables the team to work with the patient and family on resolving them.

Before the patient and family leave, they are asked if their concerns were addressed. Key points and problems identified are summarized to pull together the session and ensure that the patient and family know they were understood. The plan for communication about follow up is articulated. Importantly, the patient and family are thanked for their participation in this assessment.

Synthesis and plan

The discussion that occurs when the patient and family leave is often quite rich. It is not unusual to find that the initial problem presented is not the underlying one. In one example, the social worker uncovered that a patient was not lazy about self-care, but sought contact with nursing home staff because of a fear of abandonment that developed in childhood. In another, the occupational therapist explained self-care difficulty as arising from an apraxia—a motor planning problem—rather than a motivational problem. The physical therapist uncovered pain as the key mobility problem of a patient with dementia. Having watched each discipline conduct a focused evaluation sets the stage for the team to see the patient as a whole, integrating their findings. Change in care is more likely to occur by having participated and observed others in the arena assessment: how the physical therapist assisted a patient to move in the evaluation, how the social worker supported the person to cope with a crisis, how the physician arrived at a diagnosis, how the occupational therapist modified an activity to make the patient more successful, how the nurse targeted self health care practices, or how the speech-language pathologist elicited clearer communication from the patient.

The synthesis focuses first on the problems and plan for the patient. The synthesis also addresses how the team functioned. This too must be evaluated for continual improvement. Did one team member dominate too much, or was another too quiet? Why was a question asked, or not asked? When students participate, they are often in awe of the other disciplines' expertise in respective areas. They see their discipline role models engage in a dialogue of exchange and mutual respect with others. Further, they begin to see their own role as more expansive. Students learn a common body of knowledge in the care of older adults that includes such things as ethical issues, regulations, reimbursement concerns, caregiver burden, and the interplay of physical and mental health.

Case example

On a recent outreach visit, the local team selected a man to assess who was grappling with advance directives. His 87-year-old mother had many chronic illnesses and was in a coma in a long-term care facility. The session began with the occupational therapist talking with the son. The occupational therapist drew out who his mother was before she became ill; her interests, values, and accomplishments; what her life is like now; and

how he thinks she would view her current condition. The team learned about the active life the mother had led, how difficult it was for the man to see his mother in this condition, and how hard it was to let go of her presence. Next the physician explored the son's knowledge of his mother's health and prognosis for improvement with medical interventions. The physician gave information about the medical problems that may arise and the doubtful effectiveness that interventions would have in improving his mother's quality of life. The nurse practitioner further clarified that the physician was not suggesting that current care to his mother be discontinued, but that her life not be prolonged by extraordinary means. The social worker then followed by asking about his support system and learned the son alone was shouldering this sizable burden of care decisions for his mother. The social worker helped him identify his network for support and decision making in the extended family and church. The man expressed relief over the realization that the burden of care decisions was not his alone. The local team learned about the spiritual beliefs, needs, and concerns of this son with whom they continue to work. Students who observed this session commented on the powerful lesson of how a team works. particularly in complex situations such as the one presented. The first-hand experience in dealing with end-of-life issues within a supportive team was helpful for preparing them for their future work.

OUTPATIENT CLINIC

The nurse practitioner serves in a key coordinating role in the outpatient geriatric clinic throughout the preparation, visit, and follow-up process. In the preparation phase, background information is obtained prior to the appointment by a telephone call to the patient and family. The patient and family problems determine the disciplines attending the session. During the session, disciplines may see the patient in different combinations depending on the identified problems. For example, the physical therapist and occupational therapist may evaluate the patient together while the social worker and nurse practitioner meet with the family. The synthesis by the team is used to form a collective understanding of the pressing issues facing the patient and family. Once problems, resources, and new questions are identified, a collaborative plan is developed. For frail older adults, many possible interventions may be generated, not all of which should be implemented.²⁴ The team discussion brings out the priority issues and a coordinated sequence of interventions. For example, a patient with declining cognitive function may need a medical work-up for delirium prior to referral for home health physical and occupational therapy. Follow up with the patient and family includes an interdisciplinary comprehensive report by the nurse practitioner or physician, as well as any discipline-specific interventions by the other team members.

OUTREACH

In keeping with the broader mission of the university, the POA clinical team travels to outreach areas of the state for day-long team consultation with local teams. The two teams confer about patients and families who present challenges to the local team. The local team often consists of direct caregivers, discipline representatives, and broader community members such as the local pharmacist, county mental health social

worker, and minister. Clinicians and community members in rural areas benefit from the arena assessment experiences, as they often assume multiple roles with patients. In addition, the rural practitioners' sophistication in delivering services in rural areas offers great learning to the POA clinical team and students. In outreach, the local team implements the recommendations, with the POA team supporting with information resources. The arena assessment format also can be effective when delivered via telemedicine between the rural sites and the university.

HOME-BASED SERVICES

A grant from the Elizabeth T. and William M. Hubbard Memorial Fund supports an interdisciplinary educational program that is delivered in patients' homes. Led by the UNC POA physical therapist, advanced students from various health disciplines visit the homes of frail older adults to provide a comprehensive arena assessment of them. Particularly for disciplines that do not typically make home visits, such as pharmacy and medicine, the arena evaluation in the context of a person's home is a rich learning experience. Students from all disciplines take turns assuming responsibility for coordinating the preparation phase, evaluation in the home, and the follow up. This experience offers students memorable, first-hand understanding of the complexities of managing care of frail older adults, as well as coordinating the work of a team.

EVALUATION OF ARENA ASSESSMENT

Many of the benefits and problems of arena assessment have been incorporated

or can be inferred from the examples above. The key benefits of arena assessment are as follows:

- The patient and family experience a comprehensive evaluation and cohesive plan that incorporates medical and non-medical concerns.
- There is less redundancy of interview questions and tests, such as manual muscle tests, which is less physically and mentally taxing to the patient.
- Team performance in the presence of both peers and patients fosters a culture of collaboration, client-centered practice, and evidence-based practice.
- First-hand observation of assessment processes is the best possible method of learning about and learning from other disciplines.
- Multiple perspectives of clinicians improve problem clarification and setting priorities for care.
- Multiple perspectives are more likely to draw out strengths of the patient that can be used to adapt and compensate for problem areas.
- Unexpected issues can be addressed in a timely way. In many cases the core problem is not the initial presenting problem.
- Patients and families often reveal their concerns to the team, but they may find a connection with a particular team member who can then serve as their key contact.
- Ethical issues, placement decisions, and end-of-life planning can be more effectively dealt with by the collective wisdom of the team.
- Learners at all levels, pre-service and post-professional, learn from this method, and optimally they are mixed together in the assessment sessions.

- The process promotes creativity in assessment approaches and solutions to confounding problems.
- Participation with a truly integrative interdisciplinary team can be a transformative experience for students and professional learners.

The problems with arena assessment are as follows:

- Logistics of getting the team and the patients and families together in one space is always a challenge. Most examination rooms are too small for the full team.
- It takes a considerable amount of time for each patient, sometimes 2 to 3 hours. It does not appear to add up to more time than if the team members were acting independently and collecting redundant information.
- Reimbursement sources do not explicitly support this type of assessment.
 For example, the social worker cannot bill on the same day as the physician visit.
- The patient and family may feel overwhelmed by the team being present in one room. Other factors that may make them feel uncomfortable, such as racial issues, may stifle the process unless they are brought out into the open. This is particularly true if the clinical team consists of all Caucasians and the patient is a member of a minority group.
- Expectations of the patient and family are based on the traditional medical model care, and they may resist the team assessment. It is important for team members to communicate the value of arena assessment to the patient.
- Patients with dementia may be confused with multiple new people in the

room. A team member may take the patient out for an individual assessment while the team continues talking with the family.

Having the experience of observing and working with an interdisciplinary team as part of the educational experience can reap many potential benefits for a student. The benefits of student experiences with arena assessment include the following:

- a much-needed opportunity to learn the roles and functions of other professionals
- a deeper respect for the vital role that each profession plays in the assessment and treatment of older adults
- a broadened understanding of the unique perspective of one's own profession
- the chance to see overlaps and gaps that can be present in the care of older adults
- the opportunity to experience the benefits of treating patients in an interdisciplinary way
- the opportunity to learn how to function as an effective team member (see the box entitled "Characteristics of Effective Team Members")

FUTURE DIRECTIONS

This article presented arena assessment as a tool for comprehensive evaluation and cohesive interdisciplinary intervention planning for a select group of older adults with complex medical, social, and functional problems. It has particular value in offering geriatric interdisciplinary clinical experiences for students.

Despite widespread support for interdisciplinary approaches to care of older adults, the literature lacks clear descriptions of assessment and treatment processes. ²⁵ Thus,

Characteristics of Effective Team Members

The most important characteristic of team members is a commitment to high quality of care for older adults. From this commitment emerges a sense of responsibility to evidencebased practice, continuous learning, and follow up. Communication skills, including confidence, listening, clarity, and adjusting to cognitive levels, are important for interactions with the team and the patient and family. Team members are called on to accept leadership positions as the need arises, but they must be flexible to shift into the background when concerns are in other professional domains. Each must be an expert practitioner who selects only the priority questions and evaluations to perform during the team encounter. Each must advocate for one's own profession and highly respect all others. Role overlaps are viewed as a strength of the team rather than as a threat. The team must work together to debate and have a sense of shared values, personally and professionally. Consideration for each other as people and colleagues creates a culture of caring that is apparent to patients and families. This culture makes it safe for them to expose their real selves to us. It also enables new team members to enter the culture and be supported as they grow into their role.

attempts to capture outcomes of interdisciplinary care are flawed by vague or varied team processes. This description is an initial step toward the evaluation of the arena assessment.

In calculating Medicare billing for the outpatient setting, the cost of disciplines providing separate evaluations is more than the team assessment model described in this article. Using billing figures, a team evaluation charge is being requested for Medicare patients who have this need. Efficiency may arise from non-duplication of evaluation, as

well as the use of expert clinicians who quickly focus on significant issues.

It is as inefficient for a person with complex problems to be seen by a single discipline as it is for an interdisciplinary team to see a patient with a single problem. The informal evaluation of arena assessment found that this collaborative process promotes the two key outcomes defined at the outset of this article. First, the patient and family's primary concerns are addressed in a way that respects unique issues and values. Second, team evaluation findings are more accurate and useful to a practical course of action than if patients are evaluated separately.

Research and reimbursement mechanisms will always lag behind high-quality practice in the clinical setting, and arena assessment is no exception. The aging population with increasing numbers of frail older adults will demand different, creative health care strategies. This article described a number of strategies that the University of North Carolina POA has developed to meet those challenges. Thus, arena assessment serves as a powerful practice model to assist the most vulnerable older persons and their families to reach their goals, and to teach clinicians about the positive outcomes that teamwork can generate in a number of geriatric clinical settings.

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