Response to AHRQ's Comparative Effectiveness

The American Occupational Therapy Association (AOTA), representing the professional interests of 140,000 occupational therapists, occupational therapy assistants and students, appreciates this opportunity to present comments on AHRQ's comparative effectiveness program.

AOTA has completed systematic reviews on Occupational Therapy and children and adolescents with autism, children with behavioral and psychosocial needs, adults with stroke, driving and community mobility for older adults, adults with Alzheimer's disease, and children and adolescents with sensory sensory processing/sensory integrative disorders. However, more reviews are needed to examine the evidence for different health conditions in different health care settings. Additionally, resources are needed to disseminate and promote use of evidence at the point of care, especially in rehabilitation, which can vary from inpatient, outpatient, home, and community settings.

Dr. Carolyn Clancy, Director of AHRQ underscored the need to "focus on patients with multiple **chronic illnesses**, a group of people for whom we spend the most money and provide the worst care" (Clancy, 2008). The diagnoses of autism, stroke, and dementia are often chronic, requiring multiple interventions, including occupational therapy services. Occupational therapy promotes the performance of daily activities and participation of individuals with autism, stroke, and dementia, but further research is needed to delineate which populations benefit from treatment, under what conditions, and in which settings. The following studies are examples of research that is needed based upon AOTA's systematic reviews.

Autism

Research Question: Is behavioral intervention with occupational therapy intervention more effective than behavioral intervention (without occupational therapy) to improve the performance of daily tasks and participation in school, home, and community in children diagnosed with autistic spectrum disorders (ASD)?

Justification: Behavioral interventions are commonly used to treat autism, but given the high prevalence of sensory issues in children with Autistic Spectrum Disorders (ASD), this approach fails to address what are believed to be underlying reasons for these children's behaviors: i.e., problems with processing sensory information. Occupational therapists can assess and treat sensory processing problems that negatively influence children's behaviors and daily performance. They also can modify environments (e.g., reduce sensory overload) and tasks so that children can perform them as independently and functionally as possible, whether the task is dressing or completing a class assignment.

Stroke

Research Question: Is bilateral task-based practice more effective than modified Constraint-Induced Movement Therapy (mCIMT) to improve movement and performance of the affected arm in adults who have had a stroke within the past year?

Justification: Research suggests that task-based practice results in significantly greater strength and function than standard scare in individuals with a recent first-time stroke. However, studies have also shown that modified Constraint-Induced Movement Therapy (mCIMT) improves reach, grasp, and measures of arm and hand function. Research has not yet compared bilateral task-based practice and mCIMT on movement and function of the affected arm in adults who have had a recent stroke. Rehabilitation professionals could use the results to design the most effective intervention programs for adults who have sustained a stroke.

Dementia

Research Question: Are intervention programs that facilitate routines and environmental cueing, as provided under the supervision of an occupational therapist and under an occupational therapy plan of care, more effective than standard care to improve the performance of daily activities (e.g., toileting, sleeping, taking medications) in people with dementia?

Justification: Research suggests that routines are beneficial to performance of daily occupations (e.g., sleep) in people with early dementia . While some studies have examined the intervention of routines on behavior and performance, few studies have investigated the effect of routines and environmental cues on performance of activities of daily living (e.g., toileting, sleeping,) and mortality. If the maintenance of daily routines and provision of environmental cues provide purposeful and meaningful activity throughout the day, people with dementia may live longer, have fewer health problems and higher quality of life, which could decrease the stress of caregivers and lower costs.

Need for More Systematic Reviews and Research Funding

Although AOTA has conducted a number of systematic reviews, funding is needed to conduct more reviews to determine the most effective practices in other areas, such as early intervention. These systematic reviews have identified some effective interventions and yet, further research is needed to address knowledge gaps.

Infrastructure for Comparative Effectiveness Research

MedPAC and other health organizations have acknowledged the need for outcomes data to improve effectiveness and efficiency in the delivery of occupational therapy services. However, in order to compare the effectiveness of methods, outcomes data and process data need to be collected in standardized ways, especially in Medicare. Promoting consistency of records, assessment, and collection of data is necessary to set the stage for analyzing data.

Rehabilitation data gathering, and design of appropriate Health Electronic Records (HER) for collection of rehabilitation data is a critical area of infrastructure. Data collection may focus on acute care issues but long term outcomes (and improved quality of life as well as long term savings) can be evaluated from this information. AOTA is beginning to develop a database that involves health information technology. Funding is needed to build **a national outcomes database** for occupational therapy, along with an **electronic medical record system**, in order to compare interventions relative to patient characteristics and functional status. Data available from a national database would provide information on functional improvement which would be used to inform CMS and other health organizations about the outcomes of occupational therapy and help determine which occupational therapy interventions are most cost-effective and result in the highest functional outcomes.