January 14, 2014

Re: National Institute of Arthritis and Musculoskeletal and Skin Diseases’ Long-Range Plan (2010-2014)

The American Occupational Therapy Association (AOTA) represents over 140,000 occupational therapists, occupational therapy assistants and students of occupational therapy. We appreciate the opportunity to submit comments to help shape NIAMS’ Long-Range Plan.

As the national association representing occupational therapy, a profession dedicated to maximizing independence and function for people across the lifespan, AOTA recommends that NIAMS focus on clinical outcome studies, cost-benefits of interventions, self-management, and health promotion.

AOTA recognizes the need for clinically useful biomarkers and we strongly recommend that these biomarkers include patient-reported data. Too often, studies report on a biomarker or symptom of the disease without reporting the functional outcome, such as the ability to perform basic and instrumental activities of daily living. Many of the patients we evaluate and treat are in their productive life spans, so measuring their daily routines and habits can be helpful. Sometimes, one of the first observations that a patient makes regarding their clinical improvement is on the basis of functional activity (e.g., “I can vacuum again”) or change in routine (e.g., “I don’t have to take a daily nap anymore”). Occupational therapy practitioners possess the knowledge and skills to gather functional patient-reported data and we appreciate NIAMS’ referral to Patient-Reported Outcomes Measurement Information System (PROMIS).

Under Target Organ Damage (p.28), the LRP states that a potential research direction is characterizing and understanding how autoantibodies cause disease. Investigating antibodies may hold clues for potential treatment targets. A recent study by Brimberg et al. (2013) found that in a cohort of over 2,000 mothers of children with autism spectrum disorders, mothers with brain-reactive antibodies had an increased prevalence of autoimmune diseases, especially rheumatoid arthritis and systemic lupus erythematosus.

Under Pain (p.29) and Therapies (p.38), AOTA strongly supports developing novel therapeutic approaches to treat chronic pain conditions that encourage the development of personalized therapeutics and biobehavioral interventions. Specifically, we suggest that NIAMS fund studies that examine tailored interventions such as guided imagery, music, meditation, yoga, self-expression and purposeful activities (e.g., meaningful craft activities). Reynolds et al. (2011) found that visual art-making was a powerful means of controlling arthritis pain in a group of older women with arthritis. Researchers speculate that being deeply engaged in a meaningful activity results in “flow” and redirects attention away from pain. Exploring non-pharmacological pain-relieving interventions would help facilitate pain management because most of these activities are readily available in the patient’s community.

Despite advancements, many individuals with rheumatic diseases experience significant limitations in their ability to live independently and lead productive lives. From the perspective of rehabilitation, additional research is needed to determine the most effective interventions to ensure that these individuals are able to perform their everyday activities as independently as possible. Specifically clinical trials need to be conducted to study the efficacy of the rehabilitation interventions provided by occupational therapists. AOTA agrees with the need for comparative effectiveness of therapies to treat rheumatic diseases and alternative clinical trial designs such as pragmatic trials.
AOTA supports NIAMS’ emphasis on the need for interdisciplinary investigations that integrate behavioral and biomedical sciences. We recommend that NIAMS fund translational science examining the effectiveness of self-management interventions and health-promoting behaviors and routines. Occupational therapy researchers can contribute to understanding the individual’s daily functional needs, and how their rheumatic disease interfaces with their environments.

Additionally, more longitudinal outcome studies are needed, in combination with more cost-effectiveness and comparative effectiveness research. It would be useful to have a **cost/benefit analysis** included in outcome studies. As well, cost/benefit analyses and tracking healthcare utilization would be useful to assess safety risks that occupational therapists address individuals with rheumatic diseases, particularly medication management and fall prevention. Research has shown that improving Instrumental Activities of Daily Living (IADLs) with certain populations results in higher rates of independent living, greater participation in the community, and ultimately fewer health care costs.

AOTA requests that you give due consideration to these comments and incorporate them into your long-range plan. Thank you again for the opportunity to share our expertise in the area of maximizing independence and function as it relates to research and direct care for individuals with arthritis and musculoskeletal and skin diseases. We look forward to working with you to implement your plan as it relates to occupational therapy research and the populations we serve.

Sincerely,

Susan H. Lin, ScD, OTR/L
Director of Research, American Occupational Therapy Association

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**References**
