

Report on Master Agenda Topics

The Master Agenda protocol evolved substantially as the methodology and goals for the State-of-the-Science Conferences (SSC's) developed. The original concept was to develop a list of one to two dozen topics that would be ranked by a cohort of subject matter experts based largely on clinical interest in each subject. This list of clinical topics was intended to provide the basis for an ongoing series of Consensus Conferences that would define the standard for care in each area reviewed.

Initially this approach seemed to be working well, particularly for specific treatments that were well established and had been studied scientifically for many decades such as the orthotic management of adolescent idiopathic scoliosis. Following the meeting with experts from the National Institutes of Health (NIH) to determine if their model for consensus conferences could be modified for the field of prosthetics and orthotics, it became increasingly clear that the scientific literature to date on most clinical P&O topics was so limited that it would be impossible to draw conclusions that were evidence-based. In such circumstances, the best available evidence is usually clinical opinion, which is likely to change over time and may vary significantly from one center to another. When there are insufficient controlled scientific studies to answer clinical questions, the NIH recommends documenting the State-of-the-Science rather than trying to develop consensus standards per se. The Academy elected to follow the State-of-the-Science protocol since it better reflected the present development of the field and a detailed plan was prepared, based on the NIH model, to guide the development of future conferences.

In addition, the NIH model emphasizes the critical importance of the level of scientific and clinical literature when selecting conference topics. If there is conclusive and comprehensive scientific evidence that a specific treatment course is best and no significant clinical controversy exists, then there is little benefit from convening a conference that simply validates what is already being done. On the other hand, when a clinical method is so new that very few objective studies have been conducted, any conclusions drawn by conference participants are open to challenge and cannot be defended on a scientific basis. The ideal topic for a State-of-the-Science Conference would be an area where there are differences in clinical treatment in addition to a significant body of controlled studies that might form the basis for evidence-based conclusions about how to achieve the best outcome.

Currently, there is limited funding for research into clinical P&O treatments and the results of the small scale studies conducted are published in widely disparate journals. One consequence of this state of affairs is that very few individuals are able to stay abreast of all emerging studies about any particular aspect of the field. P&O practitioners are more likely to read clinically oriented journals such as the **Journal of Prosthetics and Orthotics** while biomechanists may be following **Gait and Posture**, physiatrists reading the **Archives of Physical Medicine** and orthopaedic surgeons keeping current based on findings published in the **Journal of Bone and Joint Surgery**. In recognition of the importance of selecting conference topics based in large part on the quality and quantity of available scientific evidence, the Academy is now emphasizing the completion of preliminary literature reviews and rankings prior to finalizing topics for future State-of-the-Science Conferences.

The list of potential topics for future SSCs that follows should be read from this perspective. Although these topics were initially selected primarily based on clinical relevance, the higher priority items are those where a preliminary search of publications in Medline, RECAL, or a similar database of peer-reviewed articles has suggested that there may be sufficient prior research to support specific conclusions. Selection of a particular topic for a scheduled conference should be based on a more detailed review of scientific abstracts to identify those areas where a literature review and ranking is likely to be productive in answering the major clinical questions.

Additional criteria for consideration in selecting the final topics are listed in the **Guidelines for the Planning and Management of Academy State-of-the-Science Conferences** and include such factors as clinical relevance, availability of subject matter experts, and importance in improving outcomes. Finally, it should be noted that the list that follows is intended to guide the thinking of SSC organizers but is not

intended to be prescriptive or exhaustive. Clinical thinking can evolve rapidly, particularly in response to new evidence that was not anticipated, and such developments may make a specific topic particularly timely for review by a body of experts.

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Potential Topic Areas for State-of-the-Science Conferences

Completed topics as of October 1, 2005

1. Orthotic Treatment of Idiopathic Scoliosis and Scheuermann's Kyphosis
2. Post-Operative Management of the Lower Limb Amputee
3. Orthotic Management of Plagiocephaly, Brachycephaly and Scaphocephaly
4. Orthotic and Pedorthic Management of the Neuropathic Foot
5. Prosthetic Ankle-Foot Mechanisms
6. Lower Limb Prosthetic Outcomes Measurements

Higher priority topics

1. Orthotic Management of Angular and Torsional Deformities of the Pediatric Lower Limb
2. Comprehensive Orthotic Management of the Child with Myelomeningocele
3. Orthotic Management of the Child with Spastic Diplegia Secondary to Static Encephalopathy
4. Orthotic Management of Traumatic Cervical Spine Injuries
5. Lower Limb Orthotic Knee Joints
6. Prosthetic Management of Proximal Femoral Focal Deficiency
7. Biomechanics of Partial Foot Amputation
8. Shock Absorbing Components in Lower Limb Prostheses
9. Myoelectric Upper Limb Prosthetic Components
10. Body Powered Upper Limb Prosthetic Components
11. Upper Limb Prosthetic Outcomes Measures

Lower priority topics

1. Orthotic, Prosthetic and Pedorthic Management of Chronic Wounds
2. Dermatologic Disorders of the Lower Limb Amputee
3. Computer Aided Design and Manufacturing in P&O
4. Neuromotor Adaptation and Learning
5. Alignment of Lower Limb Prosthetic Components
6. Gel Liners
7. Transfemoral Socket Design Variants
8. Transtibial Socket Design Variants
9. Lower Limb Orthoses for People with Cerebral Vascular Accidents
10. Lower Limb Orthoses for People with Duchenne's Muscular Dystrophy
11. Lower Limb Orthoses for People with Poliomyelitis
12. Spinal Orthoses for People with Neuromuscular Scoliosis
13. Orthotic Management of Traumatic Thoracolumbar Injuries
14. Burn Scar Management by Rigid Mask and Compression Garment