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AMERICAN ORTHOPAEDIC ASSOCIATION

AOA Critical Issues in Education

The History of Academic Leadership Education in Orthopaedic Surgery

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Background: The growth of the American academic orthopaedic community over the last 53 years has been accompanied by an expanding need for academic leadership education.

Methods: The transition of the Association of Orthopaedic Chairmen, to the Academic Orthopaedic Society, to the American Orthopaedic Association through its Academic Leadership Committee and American Orthopaedic Association Council of Residency Directors is reviewed.

Results: Academic orthopaedic community members recognized that the evolving leadership needs of the academic community could be better addressed by transitioning to a new organization, the Academic Orthopaedic Society and eventually by creating a new structure within a well aligned and well-resourced existing organization, the American Orthopaedic Association.

Conclusion: Organizational and leadership flexibility has been vital to serving the evolving need of the American academic orthopaedic community for leadership education.

Physicians establish organizations or societies to address shared issues, concerns, or interests. Organizations often begin to address issues faced by physicians in a local community. In other cases, physicians with a common practice focus or specialty come together to advance their specialty. Other organizations, such as the American Board of Orthopaedic Surgery (ABOS), are established to serve public interest. Most orthopaedic surgeons belong to several organizations. Many belong to national and regional medical societies such as the American Medical Association (AMA) or a state medical society. Most also belong to orthopaedic surgery societies or associations such as the American Academy of Orthopaedic Surgery (AAOS) and American Orthopaedic Association (AOA) as well as subspecialty societies such as the American Society for Surgery of the Hand and Pediatric Orthopaedic Society of North America. Over time, as the practice environment changes, the issues confronting members and organization leadership evolve, shift, or expand from the concerns of the organization's founders. It is the responsibility of organization leaders to consider whether new needs are best met by redefinition of mission and vision or by a different structure. The evolution over the past 53 years of organization support for the unique work of those in academic orthopaedic surgery demonstrates the

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importance of leadership flexibility and creativity to best serve the needs and interests of the academic orthopaedic community.

In the 2 to 3 decades after World War II, investments in health care skyrocketed, so that the percent of the US budget dedicated to medical care became greater than the military expenditures. Spending on health science and technology was supported for the first time by the federal government. The Veterans Administration, established in 1930, was expanded, providing medical care for millions of World War II veterans. Health insurance became a component of compensation for millions of manufacturing and service employees. In 1967, Medicare was established for millions of senior citizens and directly provided funds for graduate medical education (GME). Together with these social and economic forces, the demand for further education and training of medical students and residents soared, along with the creation of a vast array of specialties and subspecialties. In particular, the number of students, residents, and fellows grew geometrically.

In 1971, the Association of Orthopaedic Chairmen (AOC) was established to meet the challenges of growth of Undergraduate Medical Education and GME, especially in programs affiliated with American Association of Medical Colleges (AAMC)-accredited medical schools[1]. The AOC provided a forum for coordination between department chair leadership at local and national levels. Furthermore, the AOC became the liaison between the specialty of orthopaedic surgery and organizations dedicated to medical education, such as the AAMC for medical schools and the AMA for approved graduate medical resident organizations, the precursor to the Accreditation Council of Graduate Medical Education (ACGME).

There were about 50 original chair members of the AOC. The early leaders of the AOC were Drs. D. Kay Clawson and Fred Reynolds. This organization was an exclusive group, comprised only of department chairs or section chiefs within surgery departments. At its outset, all members were department chairs or section chiefs within surgery departments. During the first 10 years, the AOC built relationships with the education committees of the Orthopaedic Research and Education Foundation (OREF), the AAOS, and the AOA. The topics of interest to the AOC were the initiation of the National Residency Matching Program (NRMP), the concept of a direct match into specialty residencies, compliance of orthopaedic surgery with the NRMP, and consideration of the pros and cons of separation of orthopaedic surgery from divisions or departments of surgery at the national and local levels. The AOC met at least once per year during the AAMC meetings in Washington DC to emphasize the orthopaedic department chair role in medical school curricula design. Other challenges included the structure and curriculum responsibility of the Post Graduate Year -1 year and the GME program length.

Finally, during the first 20 years of the AOC, orthopaedic surgery training evolved from a 2-year general surgery training experience followed by a 3-year orthopaedic surgical program into the full 5-year program that we know today. Likewise, by the end of the 20th century, almost all orthopaedic surgery programs had become separate departments. During the 1980s, all AOC meetings included leadership content in their education programs. Indeed, the AOC was the first orthopaedic surgery association with subject matter focused on leadership, business, finance, as well as educational content and process. Neither clinical nor basic research was part of the educational program of the AOC. By contrast, the AAOS, AOA, specialty societies, and OREF meeting content was dedicated to clinical and basic research and continuing medical education (CME). During this period, the AAOS enhanced their considerable capability in CME. The AAOS addressed the challenges posed by the rise of subspecialties by creating advisory councils.

In the 1980s, in parallel, Dr. C. McCollister Evarts exhorted the AOA to become the academic leadership organization in 2 addresses and publications[2,3]. In his view, control of health care future required physicians to be well versed in business, finance, and leadership to protect our profession from businesses and government bureaucrats, especially concerning workforce issues, continuing competence, and financing.

In 1991, the AOC recognized the need to be more have a more unified, robust voice, as well as greater input in academic leadership education. The still exclusive 180 chair members of the AOC realized the need to be more inclusive by welcoming additional members with diverse backgrounds and viewpoints to achieve their goals. The AOC changed its bylaws to expand membership. The AOC encouraged academic faculty, core program directors, and fellowship program directors to join the expanded, more inclusive, organization that was renamed the Academic Orthopaedic Society (AOS). The goal of the new organization was to present a unified voice that could speak to medical school deans across the United States. The AOS was originally focused on research and education, but quickly pivoted to a greater focus on GME. Between 1991 and 2001, the membership expanded to about 600 members. External research funding was not required for AOS membership. The AOS undertook 2 large challenges in GME that resulted in 2 critical published manuscripts, The Clinical Curriculum for Orthopaedic Surgery Programs[4] and a Curriculum for the Ideal Residency[5]. The ABOS and Upjohn provided critical financial support for these efforts.

In 1990, the AOS, along with the ABOS, sponsored a workshop in Boston, Massachusetts, to define a clinical curriculum that would guide chairs and program directors by defining minimal expected levels of proficiency in orthopaedic surgery residency[4]. The common curriculum workshop defined a progression of knowledge and skills for nonoperative and operative treatment of throughout residency by creating matrix for 10 anatomic and disease states. This undertaking was stimulated by the common perception that residency did not fully prepare residents for the ABOS

certifying examination or independent competent practice. The effort was led by James Farmer Ed.D., a well-known educator consultant along with James H. Herndon, MD, and Neil Green, MD, representing the AOS and ABOS, respectively. Approximately 125 members of the AOS who were chairman, program directors, and full-time academic faculty participated, working in 10 groups. The document would help build a uniform, curriculum and was distributed to all AOS, ABOS, ACGME/RRC, and AOA members. Last, the AOS and ABOS engaged the AAOS, the principal CME purveyors, to use the document in the design of their CME courses.

Soon thereafter, Henry Mankin, MD, and others organized another workshop of about 140 AOS members to define the characteristics of the ideal residency by 12 separate Delphi panels. The publication of the findings was published in 1997[5]. It defined the general characteristics of the ideal residency such as graduated responsibility, critical mass of residents, adequate volume and diversity of surgical experience requiring a main geographic domain, faculty and institutional support, continuity of care, the need for physician extenders, resident, and faculty evaluation, all domains that the ACGME measures today. Likewise, cognitive knowledge and clinical patient management skills were outlined as were surgical skills and the educational environment. These attributes along with evaluation of behavioral characteristics are the basics of the ABOS, assessment of knowledge, skills, and behavior initiative today.

The AOS had been capably supported for several years by personnel from the AAOS Specialty Societies office. As the AOS matured and grew, its members' needs and aspirations expanded. The leadership of the AOS recognized that its then-current modest resources and staff were insufficient to develop and support envisioned programs for the growing community of leaders in rapidly expanding academic orthopaedic departments. AOS leadership believed that orthopaedic academic leaders should have a well-resourced organization that would also support dialog on issues related to GME with academic leaders of other specialties.

Conversations between AOS president Terry Light with AOA president Michael Simon and AOA Chief Executive Officer Tom Stautzenbach considered the possibility of the AOA providing management services for the AOS. These conversations recognized the convergence of membership and mission of the 2 organizations[6].

During an AOA weekend retreat in 1999, Drs. Herndon, Buckwalter, and Simon had defined the AOA mission "to identify, develop, engage, and recognize leadership to further the art and science of orthopaedics." The redefined AOA mission meshed well with the needs of the academic community to cultivate leadership skills in current residents, as well as to promote and support leadership development of residency and fellowship faculty. AOA Annual Meetings had historically been structured to feature a series of didactic articles and discussion. By 1998 under the leadership of Stuart Weinstein, MD, the format for AOA meetings had shifted to feature several Critical Issue symposia that crossed subspecialty domains. Time was allocated for robust discussion from the floor. Similarly, AOS programs had evolved to include several symposia with floor discussion.

Legal counsel for each organization considered the implications of a new relationship. The aim was to incorporate AOS membership and mission into the existing AOA organization. Rather than formally merging the 2 organizations, the AOS would be dissolved, and its functions, membership, and assets would be integrated into the AOA.

Discussions of the 2 organizations' boards of directors as well as meetings of the presidential lines of both organizations considered logistic issues. A timetable was established. An October 18, 2002, joint letter from AOA president Bernard Morrey and AOS president Terry Light outlining the proposed integration was sent to each member of both organizations explaining the rationale and timeline for integration and urging support of the proposal. A vote of the AOS membership would be necessary to dissolve the AOS organization and transfer its assets into a designated academic fund.

Individuals who were members of both organizations understood the synergy of the 2 organizations' missions. Members would attend a single, well-resourced meeting and only pay dues to a single robust organization. Most were supportive of the proposed integration.

Concerns were anticipated, recognized, and addressed. AOS members who were not already AOA members were concerned that they would be excluded from the new organization. A process was established to expeditiously consider all AOS members who were not AOA members for membership. Initiation fees were waived for AOS members applying for AOA membership. Other AOS members were concerned that the academic mission of the AOS might not be preserved within the new AOA structure. It was agreed that the AOS would be integrated into the existing AOA structure as the Academic Leadership Committee (ALC). A committee representative would serve on the AOA Board of Directors. It was agreed that at least 2 AOA symposia would be focused on academic issues each year.

Because most members of the AOS who were not already members of the AOA would be transitioned into the AOA membership, there was concern from some AOA members that the AOA might be "lowering its standards." Clear criteria that recognized the value of teaching were established as a domain in the overall membership criteria to guide the Membership Committee deliberations.

The vision for the new organization was openly discussed with the AOS membership during the November 8–9, 2002, AOS annual meeting in Chicago. Drs. Light and Morrey reviewed the details of the proposed transition. A panel of AOS Executive Committee members Light, Greene, and Hamilton and AOA Executive Committee members Morrey, Spengler, Simon, and Hanley endorsed the plan and responded to questions from the floor. A ballot was mailed to each member of the AOS after the meeting. Proceeding with the integration

would require a majority vote of the AOS membership in favor of dissolving the organization.

The AOS membership voted overwhelmingly to support the integration of AOS into AOA by dissolving the AOS (December 2, 2002). Financial integration occurred in 2003. The organization was officially dissolved in the State of Illinois as a registered not-for-profit corporation on December 31, 2004.

The AOA membership committee considered and admitted approximately 75 new member applicants from the AOS membership in 2003 and 2004. The first AOA meeting after integration with AOS members occurred in June 2003.

The ALC was established within the AOA. Residual AOS funds created an endowment fund within OREF in support of AOA academic activities. The committee was charged with developing programming supporting educators of medical students, residents, and fellows including but not limited to department chairs and program directors of residencies and fellowships. Michael Simon was the first chair of the AOA ALC.

The ALC was subsequently renamed the Council of Residency Directors (CORD). CORD provides tools, resources and a listserv and conducts meetings that are open to all in academic leadership roles in residency and fellowship programs without regard to AOA membership. Academic orthopaedic programs join CORD as institutional members to receive CORD benefits. Member program faculty, program faculty and fellowship directors, chairs, and residency coordinators are *CORD Affiliates*. Terry Peabody was the first chair of CORD. Program membership has grown from 105 allopathic programs in 2009 to 145 in 2014 and 195 allopathic and osteopathic programs in 2023. The JBJS Open Access AOA Critical Issues in Education channel publishes orthopaedic education articles and selected abstracts from the summer meeting[7-9]. AOA CORD has recently affiliated with Collaborative Orthopaedic Education Research Group, a consortium of educators and program leadership who promote, execute, and publish research, to advance excellence of orthopaedic GME. AOA CORD workgroups have created tools including the Orthopaedic Residency Information Network and the electronic standard letter of recommendation.

The growth and maturation of the American academic orthopaedic community over the past 53 years have been nourished by the evolution of organizational representation and support provided by the Association of Orthopaedic Chairman, the AOS, and the AOA through its ALC and the AOA CORD Academics Committee. These organizational transitions in response to the changes in the evolving academic practice environment have resulted in inclusive, robust organizational support of the academic orthopaedic community. ■

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