

Is Podiatry Turning Away from Biomechanics?

There is evidence that the profession may be relinquishing its leadership role in this vital core competency.

BY JASON KRAUS

Any businessperson will tell you that there are so many variables that can impact their business that it's difficult to know which ones to assign priority and resources to. Making the right decision can ultimately mean the difference between unimaginable success and disastrous failure. There is no one-size-fits-all solution to solving these dilemmas. But common sense dictates that if you focus on those variables over which you can exercise control, you will likely achieve a more satisfactory outcome. While podiatry can't do anything about the overall economy and has only a marginal voice in regulatory and healthcare policy debates, it can be the ruler of its own destiny in the areas of student education, Residency training, research and expansion of its core competencies.

In spite of this, there is mounting evidence that the profession of podiatry is systematically relinquishing its expertise and leadership position in the area of foot biomechanics. With increased competition and uncertain national healthcare policy as a backdrop, this willful shift would seem counterintuitive and should be more fully explored and questioned. Podiatry has developed a pattern over six decades of replacing treatment techniques with new emerging competencies. This represents a missed opportunity to evolve into a broader-based profession offering the greatest variety of therapeutic solutions

to a foot-suffering public. Instead, with each new paradigm, old skills were forgotten, new ones explored, and the foundation of the profession remained relatively unchanged. Shoe therapy and padding gave way to more structured mechanical solutions which in turn have given way to surgical techniques.

A Quiet Evolution

The miss here is that unless you are between 55 and 70 years of age, you are most likely not deploying each

dictor of the future, then these highly effective modalities will become the bread and butter of other specialists. These specialties, of course, always become podiatry's future competitors.

This evolution (some may say revolution) has been quietly taking place. There doesn't seem to be any centralized strategic plan that has been adopted to move podiatry in this direction, but it has been heading there, seemingly on its own, for a long time. The seeds planted over twenty years ago included the con-

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of these valuable skills. If you are between 35-55 years old you are probably successfully combining comprehensive biomechanical and surgical approaches to your patients. If you are younger than 35, the primary treatment plans are surgically-oriented and you are playing a bit of catch-up in understanding orthotics, bracing and other non-surgical interventions. If this trend continues unabated, today's Residents and student podiatrists may never dispense custom foot orthotics, AFO's, diabetic footwear, or other efficacious DME solutions. If the past is an accurate pre-

fluence of reduced reimbursement, improved surgical skills and a decline in proper biomechanical assessment and prescription writing for foot orthotics. These variables manifested themselves differently in individual practices, but the net effect caused many practitioners to diminish the value that they had formerly placed in comprehensive orthopedic review of foot patients.

Education and Research

Residency Directors generally agree that the biomechanical skills of

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Residents entering their programs have diminished in recent years and that the ability or desire to enhance these diminished skills are limited. In March 2011 the first-ever Residency Summit was held in Schaumburg, IL. The event, put on by Present ELearning Systems, brought Residents, Residency Directors, distinguished faculty and industry leaders together for an educational weekend. The program was a full three days of lectures and workshops. The program began early each morning and lasted well into the evening. The robust schedule notwithstanding, there were only two biomechanical lectures, each 20 minutes long and an AFO casting workshop, all sponsored by Langer Biomechanics.

Michael Shore, DPM, Director of Medical Education for Present said, "What our profession needs most from an educational perspective is to fill the void of advanced training in biomechanics of the lower limb. By combining our vast knowledge and experience in surgery, wound care, and sports medicine with this much needed knowledge in functional biomechanics, our profession will advance at a far greater pace than we have ever seen before."

Although these sentiments are echoed by many thought leaders in the profession, the education void continues. This lack of educational content is not limited to Resident training. The percentage of biomechanical lectures at most podiatric symposia is miniscule. Paradoxically, when such program content is offered, it is usually very well-attended. One recent example of this was Dr. Doug Richie's biomechanics track at the 2011 ACFAS annual meeting. This was the first time this was offered at this meeting and it was the best-attended non-main room track.

The information void is not limited to lecture time at podiatric symposia. The publication of original research concerned with foot biomechanics is becoming more and more limited in podiatry. This may be partially as a result of fewer and fewer resources being made available for biomechanics research or may be more reflective of waning interests. This is not the case outside the pro-

fession, however. There is active publishing regarding efficacy of orthotics, gait analysis, injury prevention and biomechanical control of diabetic feet in non-podiatric journals both domestically and internationally. The July issue of *The O&P Edge* has an interesting article about foot orthotics and produces an impressive bibliography. This article was written in response to an unfavorable article in the New York Times regarding foot orthotics. What was the podiatric response?

small. So the inverse relationship between the needs of the fewest patients receiving the majority of our educational attention should be questioned. Add that to a changing medical landscape where lower-cost, more conservative solutions will be incentivized, and physician compensation being directly linked to outcomes, the wisdom of this shift comes more into question.

In any business, it is hard to create and maintain competitive advan-

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The curricula at our schools might also need to be updated. Is it still predominantly Root theory and orthotic therapy, or has it evolved? Dr. Richie recently gave a lecture at Western University Podiatry School devoted to postural control mechanisms and the relevance to chronic ankle instability and catastrophic falls in the elderly. The body of knowledge of lower extremity biomechanics has exploded in the past 20 years inspired mostly by the work of non-podiatric scientists. Have the podiatry schools kept current? Are they in touch with the advances that have been made? Dr. Richie opines, "So, the final issue is that while most schools are not teaching enough biomechanics, the little bit they are teaching is probably outdated and out of touch with the current state of the art."

How Will Revenues Be Replaced?

There is also a very practical dilemma to be considered. With bracing, foot orthotics, AFO's and other biomechanical solutions (taping, footwear, etc.) accounting for over one billion dollars of podiatric revenue, when the professional transformation to a surgical subspecialty is complete, how are those revenues going to be replaced? Even in some of today's highest-profile surgical practices, the percentage of patients who require or desire foot surgery is quite

tages. The comprehensive understanding of lower extremity biomechanics in combination with other podiatric competencies such as surgery, dermatology, wound care and medicine, made podiatry unmatched in its ability to resolve foot and ankle problems. While there are other specialties that have expertise in EACH of these separate areas, podiatry is the only one that has expertise in ALL these areas. To give any of this up severely reduces competitive advantages and will make splitting the patient pie more challenging in the future. To make matters worse, the parts of the current diminishing arsenal available to podiatrists are hungrily being absorbed by pedorthists, orthotists/prosthetists, chiropractors, physical therapists, athletic trainers and of course retail outlets. How many more reminders does podiatry need that the demand for these services doesn't diminish with waning professional excitement? Only the podiatric participation does. **PM**



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