Invited Perspective

The Future of Physiatry: With Challenges Come Opportunities

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“What does the future of physiatry look like?” The answer is certainly multifaceted and dependent on the context in which it is being asked: economical, clinical, technological, educational, and so forth. Young medical students considering a physical medicine and rehabilitation (PM&R) residency and current PM&R residents are particularly interested and possibly wary about physiatry’s future. In 2006, Gans [1] warned about trends that would potentially impact this specialty. More recently, with health care reform and other political factors impacting the practice of medicine as a whole, the positioning of the specialty of PM&R within the health care milieu has been more closely analyzed [2]. But, with challenges come opportunities. From within the diversity of our specialty, common themes and focus (ie, function and quality of life) should serve us well as we navigate through a changing landscape of health care delivery.

My first involvement with organized physiatry was at an American Academy of Physical Medicine and Rehabilitation (AAPM&R) Annual Assembly as a medical student. A resident I met during one of my rotations encouraged me to attend the annual assembly and even offered to share her room with me. I clearly remember that my initial feeling of intimidation changed to one of awe and comfort, as physiatrists from all over the country freely gave me advice and shared their experiences with me. I was hooked. During residency, I was honored to move up within the Resident Physician Council, starting as a bylaws committee member and eventually serving as president. This experience afforded me the opportunity to be mentored by some of the greatest leaders in the field while learning about “big picture” issues that continue to impact physiatry.

From my current perspective as the chairperson of the AAPM&R Membership Committee, I have observed an increased bond and pride among physiatrists recently, which I find particularly heartening and which I believe bodes well for physiatry in the future. In this position, and as president of the Resident Physician Council, I also have had the opportunity to participate in the growth and evolution of AAPM&R, beginning with the revision of AAPM&R’s mission statement and the formulation of our strategic plan and objectives. This allows the board of governors to systematically assess proposals and opportunities while minimizing the influence of innate biases and personal agendas. The AAPM&R has changed tremendously in the past 5 years, and, although change was initially met with skepticism, we are definitely better equipped to handle some of the changes coming our way. Our educational offerings have improved, both in terms of relevance and quality. This journal, PM&R, has rapidly become a frequently cited and useful resource for the practicing physiatrist. There is more communication among members and more opportunities for growth, collaboration, and leadership within the AAPM&R.

I have not missed an annual assembly since the year I attended as a medical student, watching the changing landscape of physiatry, while realizing the timelessness of common physiatric principles, and emphasis on the importance of patient care and advocacy. This was clearly evident in the standing-room only capacity during the presidential address at the 2010 AAPM&R Annual Assembly in Seattle, where Elizabeth Sandel, MD, shared a video montage of her oral history interviews with physiatrists from across the country and the world. There were common threads identified in the stories recounted by the featured physiatrists, including mentoring and the desire and ability to “build.” This sense of pride continued during the address by Stanley Herring, MD, on sports concussion, and the tragic story and strategy behind the passage of the Zackery Lystedt Law (serving to minimize the chances of catastrophic consequences of brain injuries in student athletes). These moments

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Disclosure: 9, chair of AAPM&R Membership Committee

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bring back my initial excitement when I first discovered physiatry and my ultimate decision to pursue this field. The value of being a member of your specialty organization peaks in these moments, when you feel a sense of belonging to something bigger than yourself.

THE CHANGING ECONOMIC LANDSCAPE

In reviewing economic factors that have influenced the health care market in past decades, several themes come to light. First, the basic supply and demand model works in medicine, with physiatrists providing services where there is greatest demand and economic profitability. In a 1986 survey of AAPM&R members commissioned by the board of governors[3], 65% of respondents were under 43 years of age; 53% practiced in a single location, with an average working approximately 50 hours per week; and the most-frequent diagnosis being treated was “pain syndrome.” Consultation was the primary activity, with most physiatrists practicing in a hospital-based setting. A 1996 study examined the supply-and-demand workforce model for physiatry and concluded that, “Physiatrists will continue to be in excess demand through the year 2000[4].” That same article predicted that there has been and will continue to be excess supply in certain geographic areas. At the time that article was written, managed care was growing in the form of health maintenance organizations and staff model plans such as Kaiser Permanente. In the late 1990s, the backlash from physicians, patients, and hospitals started to unravel managed care. The insurance industry then started to place increasing emphasis on wellness and disease management. “Managed care” has been replaced by a new label, “accountable care,” but the intent is still the same: to reduce the burden of health care costs on society and to maintain efficient and effective delivery of health care, while placing the consumer-patient at the focal point of this process.

So how does physiatry thrive in this model? Physiatrists are uniquely expert in treating chronic conditions. Even when we treat acute injuries, we are always emphasizing long-term improvement and prevention of future injuries. We gain some satisfaction from providing short-term or temporary solutions but take greater pride in educating our patients about the cause of their injuries and from empowering them to minimize future damage. The physiatric model also emphasizes patient empowerment and patients’ control of their health, which ideally results in less disability and dependence on external sources of support and, thus, reduces the economic burden on society[5]. We are also able to help coordinate care and work in “teams” with other specialists and allied health professionals. We understand conditions that crosscut multiple organ systems. Physiatrists are innovators and are often the first to use new treatment methods and technology, while also using existing resources in different ways to address the needs of our patients. All of these characteristics will allow us to thrive in a holistic model of care with emphasis on cost-effectiveness, self-management, and patient empowerment.

FROM SPECIALIST TO GENERALIST?

The past decade saw increasing subspecialization of physiatrists, with many physiatrists choosing to pursue fellowship training after residency[6]. Informal surveys of AAPM&R members and graduating residents also have found that physiatrists are increasingly entering outpatient private practice settings with more emphasis on musculoskeletal care. But, as reimbursement for interventional procedures and surgeries decreases, the current market will likely swing the pendulum the other way, with more hospital-based positions opening up for “general” physiatrists, who can cover a few inpatient rehabilitation beds, perform electrodiagnostics testing, and provide outpatient musculoskeletal care. Already, I see many of my successful physiatrist friends and colleagues in this type of setup.

Our unique skill set of being able to care for inpatient rehabilitation patients, provide diagnostic testing and consultation for neuromuscular disorders, advocate for our patients with a disability through the legal system, and continue to provide ethical and conservative outpatient musculoskeletal care will likely increase demand for physiatrists in accountable care organizations, medical homes, and hospital systems. However, as reimbursement decreases and hospitals merge with or acquire private practice physician services, there will likely be competition from other specialists regarding who should provide certain services and perform certain procedures in those systems. Cost containment will also lead to more audits, which is already happening in the form of recovery audit contractors and whistle-blower programs. The vast majority of physiatrists will likely fare well because most are conscientious and ethical providers of care, with an emphasis on improvement of function and quality. We must continue to work with primary care providers and other specialists who share our goals, and partner with other organizations to ensure that our interests and our patients’ interests are protected.

TECHNOLOGICALLY SAVVY AND RESEARCH POOR

Physiatrists have embraced technology, including cutting-edge advances. Consider, for example, prosthetic design and application in patients with combat- or industrially related injuries. Musculoskeletal ultrasound was quickly embraced and taught by physiatrists looking to improve the accuracy of their physical examination and interventional procedures while reducing the risk of radiation exposure. Physiatrists have invented devices, modified available technology for use in the rehabilitation setting (e.g., Nintendo Wii [Nintendo of
America Inc, Redmond, WA), and adapted our practice to incorporate electronic medical record systems and communication systems. Residents and medical students have increasingly used social media, smart phone applications, and other technologies to raise awareness and improve physiatric education. They readily share resources with each other and are usually some of the first users of new AAPM&R benefits such as the PhyzForum and AcadeME. They start blogs about physiatric topics, hold virtual journal clubs, promote fundraising events for the Foundation for Physical Medicine and Rehabilitation, release a smart phone application for EMG/NCS or tracking a patient’s pain, and engage in lively discussions on online forums about the future of physiatry. Traditional marketing is being replaced by cheaper and more effective “viral” marketing and social media buzz. The next best marketing for physiatry may be a “viral” one.

Unfortunately, research may be our specialty’s Achilles heel. As a relatively young field, physiatry does not have an extensive volume of evidence-based research. There is also a relatively small number of physiatric researchers currently supporting the clinical practice of physiatry. It is true, physiatrists are taking part in cutting-edge research, such as the use of stem cells (for treating disk degeneration, stroke, spinal cord injury), but there are few residency graduates pursuing research fellowships, with a substantial proportion of research in rehabilitation being conducted by our allied health colleagues. Further, outcome parameters such as “function” or “quality of life” are difficult to study and measure. Yet, as physiatrists are afforded the opportunity to participate in the national discussion about value-based health care, we must develop and present unique outcome metrics that encourage our membership’s participation in comparative outcomes research. To echo the commentary by Stuart Weinstein, MD, from his 2002 Rosenthal address to the AAPM&R membership, “Embrace the technology, but obey the science. Anything less doesn’t deserve the physiatric label [7].”

**TRAINING PROGRAMS MUST REFOCUS**

PM&R residency training programs must educate and prepare our graduates for career pathways. In 1998, Jacoby and Meyer [8] published in JAMA a commentary about the increasing difficulty of physiatry residents in locating their first jobs. Delisa et al [9] conducted a survey of graduating seniors in 1999 and found that 28% planned to enroll in a fellowship, with musculoskeletal and sports medicine being the most common. Musculoskeletal medicine was also the most popular job type sought by those not planning on pursuing a fellowship [8]. That same survey revealed that only 15% used career planning guidance provided through their residency programs [9]. Past studies also found that information reported by residents about their own employment-seeking experiences were different from those reported indirectly by program directors [10], which may indicate some level of disconnect between the perceived needs of the residents by academic physiatrists and leaders of training programs with the needs expressed by the residents themselves. Informal surveys by the Resident Physician Council and conversations with current residents seem to indicate that there is not enough guidance about career planning, practice management, and employment.

There also has been some controversy in recent years about the content of clinical training during residency. There is a wide range of variability in the knowledge base and skill set that graduates possess when they go into the job market. Some residencies emphasize inpatient rehabilitation training whereas others emphasize outpatient musculoskeletal and procedural training, or even electrodiagnostic medicine. We need to more clearly define the basic foundation of knowledge that a physiatrist should possess upon graduating from residency to allow employers and consumers (ie, patients and payers) to understand and appreciate the full spectrum of care that a physiatrist can provide. There should be basic procedural skill competence supported by clinical knowledge and decision making behind the procedural skills. After all, it is the physiatric mindset that guides how and when to use procedures, which defines physiatrists’ uniqueness compared with many other specialists. By promoting our emphasis on functional outcome and cost-effective use of resources, we can become preferred providers for all disabling conditions.

For those who choose to pursue advanced training in a subspecialty, there are limited slots available in the more popular fellowships in ACGME-accredited sports medicine and pain medicine programs. Many of these fellowships are directed by non-physiatrists. There also are private fellowships and non-ACGME accredited academic fellowships available to graduating residents, but the quality, depth, and breadth of training available in these fellowships vary widely. In general, PM&R residents believe that the quality and quantity of musculoskeletal training and procedural training during residency could be improved. If residency programs across the country consistently produced physiatrists who possess a minimum base of knowledge about neurologic rehabilitation, musculoskeletal medicine, peripheral procedural skills including spasticity management, basic spinal procedures, electrodiagnostic knowledge and skills, prosthetic and orthotics, and inpatient rehabilitation, then there would be less confusion in the marketplace about the qualification and skill set of a physiatrist and how he or she would fit into his or her system or practice. But, because technology advances and more interventional procedures are within the realm of physiatry, fellowship training will still be necessary to acquire these advanced skills, much like interventional cardiology or interventional radiology. A more precise definition of the content of training programs will definitely help young physiatrists prepare for their future careers.
SUMMARY

In conclusion, the future of physiatry is as bright as the people drawn to the field. We must continue to reach out to medical students and residents, and to provide the guidance, training, and support that they need to have a successful career in physiatry. Market and political forces will continue to shift the practice of medicine, but physiatry is uniquely positioned to adapt to changes. In the immediate future, there will likely be more consolidation of solo practitioners into large multispecialty groups or hospital-based employment. More emphasis will be placed on individualized prevention-based therapy, but cost containment will also be an issue. The advancement of technology and genetic research, including stem cell research, will help reverse disabling injuries and conditions. Physiatry in 20 years will look different than physiatry now, but the basic philosophy and character of physiatrists should stay similar to those of current physiatrists.

REFERENCES