

Challenges and Opportunities in Academic Physiatry

The future of our specialty

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M E D I C I N E

The future of Academic Physiatriy

- Let's dream for a bit
- The Association of Academic Physiatriy
- Strategy Group
- Environmental Scan
- Mission/vision/goals

The Association of Academic Physiatry - AAP

- Organization focused on supporting all activities around academic physiatry:
Research, Education, Administration,
Mentoring, Advocacy
- Founded in 1967
- More than 2700 members from all over the world

AAP Strategic Planning Workgroup

- **Pablo Celnik, MD**
- **David Morgenroth, MD**
- Susan Apkon, MD
- Cheri Blauwet, MD
- Anthony “Tony” Burns, MD
- Cecilia Cordova, MD
- Walter Frontera, MD, PhD
- Sandra Hearn, MD
- Prakash Jayabalan, MD, PhD
- Peter Lim, MD
- Alex Moroz, MD
- Dani Perret, MD
- Danielle Powell, MD
- Matt Puderbaugh, DO
- W. Evan Rivers, DO
- Gwen Sowa, MD, PhD
- Monica Verduzco-Gutierrez, MD

Environmental Scan



Macro/Societal Trends

Shifting demographics

- Globalization → diversity (people, disability, access)

- Aging → a 

- Over 2.4 k  ally need
rehabilitat

- Rehabilita  ed:
– culturally

– Expansion of scope to address disability

– Build local capacity: ISPRM, WHO

Macro/Societal Trends

Impact of global health crises

- COVID-19 pandemic → Long COVID
- Natural disasters and wars
- **Physiatry has a clear role responding to crises by playing a key role in recovery and disease re-education**
- **Natural and societal disasters demonstrate our impact in providing high value, cost-effective, and expeditious care**



Macro/Societal Trends

Rehabilitation in population health management

- PMR framework
 - ICF and social determinants of health
- Physical activity for health promotion and chronic disease prevention
- Precision rehabilitation to prevent and minimize disability

Technological Advancement

Technological revolution is impacting patient care, training, and research

- Sensor technology
- Enhanced health informatics
- Robotics
- Brain-computer interface research
- Augmented reality



Technological Advancement

Clinical Care

- Virtual care (phone, video, connected devices, chats and wearable technologies) will facilitate functional and medical assessment
- Home technologies will lead to more complex patients in IRF
- Physiatrist will need to advocate for the inclusion of people with disabilities in AI algorithms
- PMR will need to create decision support systems to deploy robotics/exoskeletons, functional electric stimulation, and other novel therapies

Technological Advancement

Academic Medical Centers (AMCs)

- AMCs reach will extend beyond geographic constraints → improve access to specialty care
- AMCs will need to be nimble to be responsive
- Partnerships with industry and community practices will be important
- Financial pressures
 - Managed through increased efficiency of care as well as non-traditional revenue sources (e.g., accelerated commercialization and development products)

Technological Advancement

Data Collection and Analysis Tools

- Big- and real-time data will generate new research and accelerate the assimilation of new knowledge
- Tele-functional measurements will provide predictive analytics and enable **precision rehabilitation** to prevent or minimize the impact of disability.
- AI will identify previously unrecognized contributors to impairment and disability



Technological Advancement Education

- Medical education must include training in patient monitoring and competency with new technologies
- Educational assessment need to incorporate big data to improve individual trainees' performance
- Technology can facilitate partnership across training programs

Diversity and Global Outreach

Education

- **Physiatry will need to expand education of health care disparities and social determinants of health given its impact on outcomes and disability**
- **Disparity toolkit should be developed for training programs to ensure exposure to these issues**



Diversity and Global Outreach

Diversity in PMR

- In the US, PMR is less diverse relative to other specialties
- Programs need to attract and retain marginalized groups in academic physiatry to help increase diversity
- Professional societies should help and support development of these resources
- Mentoring programs for academic advancement and promotion are critical

Diversity and Global Outreach

Global Outreach

- The core mission of academic medicine has become global
- Few studies compare rehabilitation care and training across different countries
- Understanding these differences can help physiatrists share knowledge and resources
- The AAP and ISPRM have started to facilitate these opportunities for collaboration

Economy

Health Care Policy and Reimbursement

- In the US, expansion of Medicare and health insurance
- Shift from fee-for-service to value-based programs: quality of care rather than quantity of treatments
- Cost control strategies (care outside the hospital and IRF) leave hospitals and IRFs with more complex patients
- Psychiatrists should expand the scope and shift from IRFs-only to the rest of the continuum of care

Economy

Academic Department Revenue Sources

- Academic departments are under financial pressure to be sustainable while supporting education, research, and clinical care
- The pandemic and changes in workforce had increased this pressure
- AMCs are merging with other private organizations, forming large health care networks
→ **cultural adjustment and adaptation**
- Research capacity development remains a critical need in the PMR field

Education/Learning Environment

- Workforce analysis and this entire presentation indicate there is a need to train more physiatrists all over the world
- New training should include all the current trends: aging, technological development, diversity needs, global opportunities and economic trends
- Recruitment of appropriate trainees is critical: outreach to medical students and medical schools without PMR
- Virtual education is an opportunity to reach or compliment training in regions with limited access
- Clinical skills training within telehealth should be incorporated in the curricula

AAP Strategic Plan



● Vision

- A thriving global academic community leveraging mentorship, leadership and scholarship to maximize human function.

● Mission

- Empower academic physiatrists to advance the science of physical medicine and rehabilitation, educate leaders of the future and champion physiatry to transform healthcare.

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GOALS:

Enhance the Impact of Physiatry in Academic Institutions

Create, strengthen and integrate rehabilitation departments and divisions within academic institutions by enhancing education, faculty promotion, and research capacity.

Champion Physiatry to Transform Healthcare

Shape, disseminate, and promote innovative and impactful rehabilitation research and education.

Facilitate the Growth and Success of Academic Physiatrists

Foster a culture of academic development to enable and inspire each individual to achieve their professional goals.

Foster Community within Academic Physiatry

Grow a global academic physical and rehabilitation medicine community while supporting personalized, small-group networking and thematic professional connections.

Develop and Support Leaders of the Future

Cultivate skilled and diverse leaders to expand and deepen the influence of academic physiatry.

Dream Again

Conclusions

- Society and health care system will continue to evolve and be presented with new challenges all over the world
- Rehabilitation medicine must respond dynamically and proactively to unpredictable events (e.g. pandemic) and emerging opportunities
- Our field must remain consistently self-reflective, forward-looking, creative, proactive, and thoughtful in our approach

Questions / Discussion

