

The background features abstract, flowing orange lines that sweep across the page. A horizontal band of orange contains a fine grid of small squares. A vertical blue stripe is positioned on the right side of the orange band. The bottom half of the page is white with a light blue grid pattern.

# **NATIONAL PA RESEARCH AGENDA**

**JANUARY 2012**

# FORWARD

For decades, there has been discussion of the need for evidence-based research about the physician assistant (PA) profession with clear directions and strategic goals. To further that objective, the American Academy of Physician Assistants (AAPA) developed this PA-focused Research Agenda on the 45th anniversary of the profession's founding in 1965.

Forming the Research Agenda was a two-step process. A Research Summit was held in March 2010 with three specific aims. The first objective was to identify key questions regarding the PA profession upon which a framework for a Research Agenda would be built. The second objective was to reach consensus on core strategic, specific, measurable, achievable, realistic and time-specific goals for a Research Agenda. The third objective was to identify individual and institutional stakeholders, within the PA community and beyond, that have a strong interest in and motivation for advancing and supporting a Research Agenda for the profession. The Summit identified 20 research topics in four areas: PA Workforce, PA Value, PA Roles and PA Education.

After the summit, the AAPA Board of Directors commissioned a Research Steering Committee of nationally recognized experts in health workforce research, chaired by former Rear Admiral Kenneth Moritsugu, MD. The committee convened in November 2010 to begin prioritizing topics on the proposed PA Research Agenda, delineating goals, establishing timelines and identifying synergies for funding. The 20 topics from four research areas from the summit were prioritized by steering committee members through meeting discussion and ranking by individual members. The top three priorities in the PA Research Agenda are cost-effectiveness, access to care and workforce composition.

I thank the Research Steering Committee members, the Research Summit attendees and Academy staff leadership. Without their insight and efforts, there would not be a National PA Research Agenda as a milestone document to guide future PA-focused research.

*Patrick E. Killeen, MS, PA-C*  
*Board Chair and Immediate Past President*

# PLOTTING A FUTURE FOR PA RESEARCH

PAs make significant contributions to the U.S. healthcare system and the patients they serve. Obtaining scientifically valid, methodologically correct, generalizable and policy-relevant research on the PA profession has become crucial to future development of this profession.

Policymakers, academia, community leaders and healthcare consumers want to know the roles and value PAs bring to our healthcare system. We are at a historic point where we need to establish strategic goals for PA-focused research. The AAPA Board of Directors and leaders recognized the need for better research and commissioned the Research Steering Committee to develop a comprehensive PA research agenda to identify directions and priorities that will guide production of accurate, relevant and usable findings.

The National PA Research Agenda not only lays out a roadmap for future PA research priorities but also serves as a way for all researchers across the profession to advance.

I am pleased to see that the Academy's effort did not stop with a paper agenda but continued to establish a national PA Research Alliance (PARA), a permanent platform to support the coordinated, high-quality and original research necessary to advance the PA profession. PARA has four subgroups: PA Workforce Research, PA Value Research, PA Roles Research and PA Education Research, which match the four research areas identified in the PA Research Agenda. PARA gives PA-focused researchers a place to exchange research ideas, methodologies, findings and recommendations using social media, an annual member forum and the Research Day Symposium at the Academy's annual conferences.

The Academy's intent is that this National PA Research Agenda will be progressively implemented to advance team-based, patient-centered medical care and promote PA workforce research in a systematic, collaborative and coordinated manner.

*Robert L. Wooten, PA-C*  
*President*



## Major Contributors

*(In alphabetic order)*

**AAPA PA Research Agenda Organizers:** Raymond Fang; William F. Leinweber; Christal Ramos; Sabrina Smith.

**AAPA Research Steering Committee Members:** David Asprey, PhD, PA-C; James Cawley, MPH, PA-C; Randy Danielsen, PhD, PA-C, DFAAPA; Anita Glicken, MSW; Roderick Hooker, PhD, PA-C; David Meyers, MD; Michael Millman, PhD; Perri Morgan, PhD, PA-C; Kenneth Moritsugu, MD, MPH, FACPM (Chair); Folusho Ogunfiditimi, DM, MPH, PA-C; Frances Placide, MMS, PA-C, OTR; Edward Salsberg, PhD.

**AAPA Research Summit Speakers:** Melinda K. Abrams, MS; Carolyn Clancy, MD; Stephen H. Hanson, MPA, PA-C; William F. Leinweber, MBA; Jeffrey Lemieux; Mark B. McClellan, MD, PhD; Leonard D. Schaeffer; Perri Morgan, PhD, PA-C; Kenneth Moritsugu, MD, MPH, FACPM; Fitzhugh Mullan, MD; Janet Pagan-Sutton, PhD; Mary Woolley.

**Other AAPA Research Summit Meeting Participants:** Athena Abdullah; Timi Agar-Barwick; Lisa M. Alexander; Scott Arbet; David Asprey; Patrick Auth; Ruth Ballweg; Jeff Baynes; Rami Ben-Joseph; Marc Berk; Dennis Blessing; Brooke Braun; Jerald Breitman; Kate Callaway; Jim Cawley; Agnes Compagnone; Tim Dall; Ann Davis; Meredith Davison; Richard Dehn; James Delaney; Michael Doll; Clese Erikson; Carl Fasser; Michael Flesher; Frank Fortier; Howard Glassroth; Anita Glicken; Sandy Harding; Roderick Hooker; Paul Jacques; Jerald Katzoff; James Kilgore; Patrick E. Killeen; Eric Larson; Jonathan Lerner; Mei Liang; Cindy Lord; Jennifer Lucado; Daniel Mareck; Sheila Mauldin; Jennie McKown; Bob McNellis; David Meyers; Mike Millman; Marc J. Moote; Folusho E. Ogunfiditimi; Michelle Ona-DiBaise; Josanne K. Pagel; Patti Pagels; John Paul; Sheryl Paul; Don Pedersen; Emil Petrusa; Stephen Petterson; Maura Polansky; Jim Potter; Michael Powe; Christal Ramos; Ellen Rathfon; Tamara Ritsema; Lisa Robin; Ted Ruback; Dana Sayre-Stanhope; Claudia Schur; Don Sefcik; Freddi Segal-Gidan; Lynn Schoenfelder; Sabrina Smith; Pat Spurlock; William Stanhope; Greg Thomas; Nina A. Thomas; Barbara Tombros; Mary Warner; John Western; Denni Woodmansee.

**Other AAPA Research Steering Committee Meeting Participants:** Lotte Aalling; Donna Crandall; Howard Glassroth; Patrick E. Killeen; Bob McNellis; James Potter; Greg Thomas; Nadra Tyus.

**AAPA Staff Support:** Paola Daly; Elizabeth Howton; Josh Umar; Adrienne Wyatt.





# INTRODUCTION

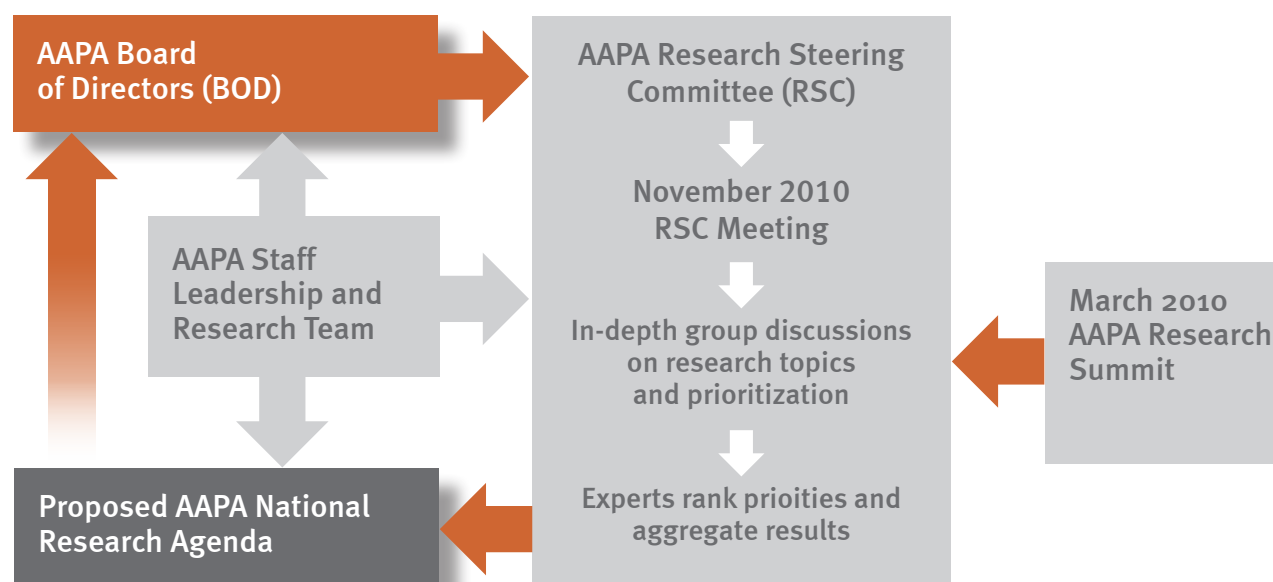
The PA profession has grown rapidly since the creation of the first PA education program in 1965. In its 45th year, PAs have become an established and well-accepted clinical part of the U.S. healthcare system. However, PA-focused research has not matured as quickly. It has lacked overall strategic goals, and research needs have not been clearly defined. As a result, PA-focused research has been conducted unsystematically, producing more breadth than depth.

With this in mind, the American Academy of Physician Assistants was asked by its board of directors to develop the first national PA research agenda. It was specified that the agenda should identify research priorities and establish a solid foundation for research projects by April 30, 2011.

# METHODS

The development of the National PA Research Agenda is shown in Figure 1. AAPA first sponsored a PA Research Summit in March 2010 to begin developing the framework for the research agenda aimed at guiding the production of accurate, relevant and usable findings. Figure 2 shows the 20 research topics identified at the Summit in four major PA research areas that address compelling research needs. Then, the AAPA Board of Directors commissioned a Research Steering Committee (RSC) of nationally recognized experts in health workforce research, chaired by former Rear Admiral Kenneth Moritsugu, MD. The committee convened in November 2010 to begin prioritizing topics on the proposed PA research agenda, delineating goals, establishing timelines and identifying synergies for funding.

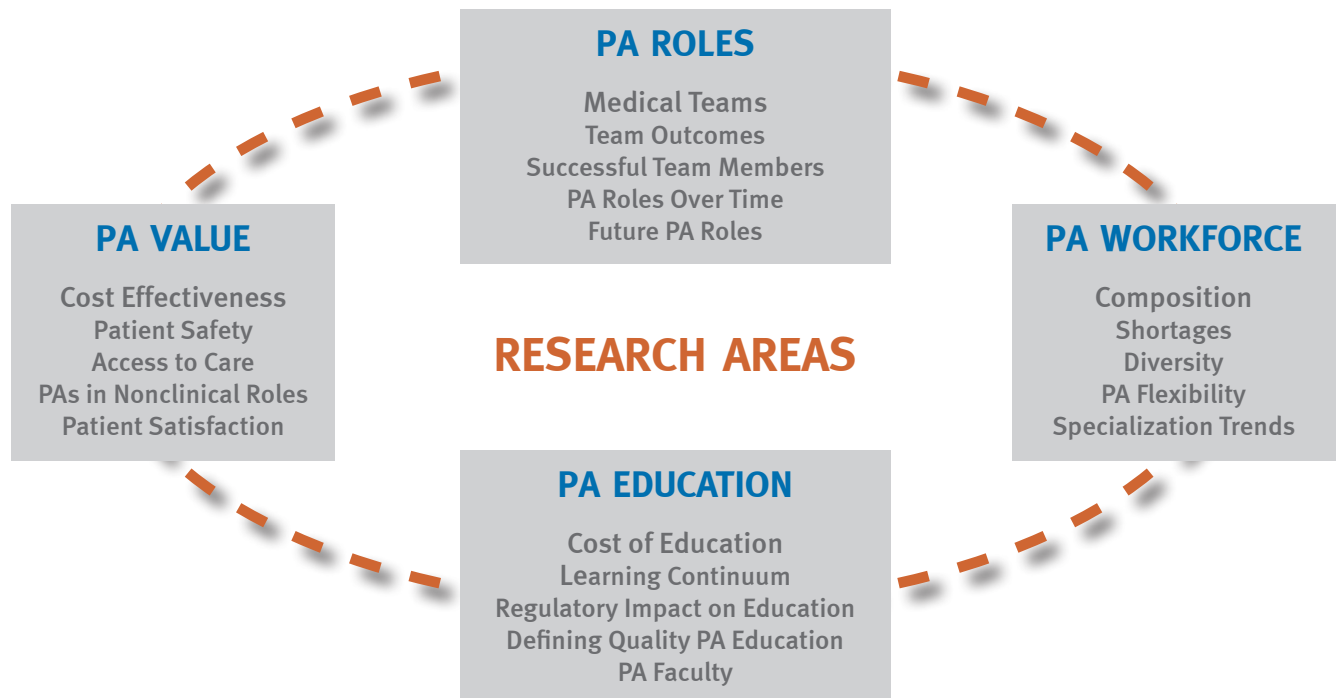
**FIGURE 1: Research Agenda Development Process**



Subjects of discussion for this meeting included the value PAs add to the healthcare system, the state of data collection efforts on PAs, issues of access and cost-effectiveness, diversity within the profession and the need to enhance our research infrastructure.

After in-depth discussions at the meeting of four broad research areas —PA Value, PA Workforce, PA Roles and PA Education—a draft of the proceedings was circulated and feedback from committee members was solicited. All members were asked to provide their final personal priority rankings of the 20 research topics by assigning a numerical value between 1 and 20 to each (with 1 being the highest priority and 20 the lowest). Their feedback has been aggregated into one priority table displaying their preferences for which topics ought to be part of the National PA Research Agenda.

**FIGURE 2: Twenty Research Topics in Four Major PA Research Areas**



# RESULTS

The results demonstrated four priority score clusters. As listed in Table 1, four specific research topics were identified in the high-priority cluster, three in the medium-high-priority cluster, eight in the medium-low-priority cluster, and five in the low-priority cluster.

Research topics are listed in Table 1 in order of descending importance. It should be emphasized that all research topics are important and correlated with one another. One lower-ranked topic may be reflected through other relevant topics in higher rank. For example, Workforce Diversity, ranked ninth, is associated with Access to Care, the second-priority topic on the Agenda. Thus, assessing research topics requires a comprehensive and systematic understanding of all PA issues.

The following four topics sit in the high-priority cluster based on scores given by the RSC members.

- 1. Cost-effectiveness (PA Value):** Cost-effectiveness research identifies healthcare providers and strategies that contribute to stabilizing healthcare costs and thus benefit consumers, payers/insurers and employers. The ability to demonstrate the use of PAs as a cost-effective model of care will increase opportunities for PAs in various settings.
- 2. Access to Care (PA Value):** The main goal of a compassionate, rational healthcare system should be to ensure timely and appropriate access to care. Research is needed on how PAs can increase access to care and help offset physician shortages and maldistribution.

## High Priority Research Topics



## Medium-High Priority Research Topics

**3. PA Workforce Composition (PA Workforce):** There are several reasons why this topic is important. First, establishing the baseline will help to improve how future projections are made. Also, the topic makes known what influences PA workforce composition and productivity. Finally, this topic helps to determine the important characteristics of PA workforce composition. Participants identified several existing databases from which researchers can collect information regarding this question. These data sets include the National Commission on Certification of Physician Assistants recertification lists, licensure applicants, AAPA census, and data from the Physician Assistant Education Association.

**4. PA Shortage (PA Workforce):** Given the well-documented shortage of physicians over the next decades, projecting future needs and address the changing workforce economics of medical teams will be of paramount information to policymakers and healthcare systems.

The following three topics sit in the medium-high-priority cluster based on scores given by the RSC members.

**5. Outcomes of Currently Identified Teams (PA Roles):** The gathering of information in this area will help healthcare teams optimize their value to individual patients and the healthcare system as a whole.

**6. Medical Teams (PA Roles):** By examining team compositions, researchers can determine which characteristics are shared by the most effective teams. Possible data sets to use when analyzing this question can include those from AAPA, the National Commission on Certification of Physician Assistants, the Physician Assistant Education Association, the Accreditation Review Commission on Education for the Physician Assistant, rural Federal Area Health Education Centers and large healthcare organizations such as Kaiser and Geisinger. For research of this scale, it is necessary to explore appropriate avenues for funding.

**7. Patient Safety (PA Value):** This topic is critical because 10 years after the release of the Institute of Medicine's report entitled "To Err is Human," little or no measurable progress has been made to increase patient safety. Additionally, because patient safety is a priority for patients, practices





## Medium-Low Priority Research Topics

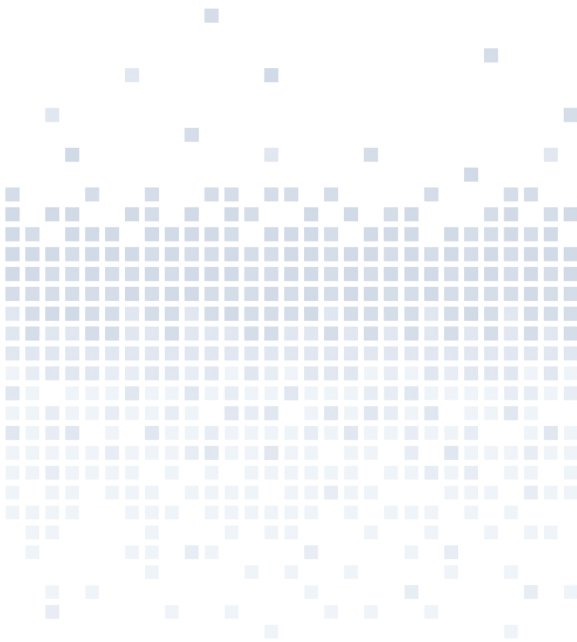
**TABLE 1: Summary of the National PA Research Agenda**

RESEARCH TOPICS	CATEGORY	PRIORITY
<b>High Priority</b>		
Cost-effectiveness	PA Value	1
Access to Care	PA Value	2
Composition	PA Workforce	3
Shortages	PA Workforce	4
<b>Medium High Priority</b>		
Team Outcomes	PA Roles	5
Medical Teams	PA Roles	6
Patient Safety	PA Value	7
<b>Medium Low Priority</b>		
Patient Satisfaction	PA Value	8
Diversity	PA Workforce	9
Future PA Roles	PA Roles	10
PA Adaptability	PA Workforce	11
Cost of Education	PA Education	12
PA Role Change	PA Roles	13
Successful Team Member	PA Roles	14
Specialization Trends	PA Workforce	15
<b>Low Priority</b>		
Regulatory Impact on Education	PA Education	16
Defining Quality PA Education	PA Education	17
PA Faculty	PA Education	18
PA in Nonclinical Roles	PA Value	19
Learning Continuum	PA Education	20

and society overall, it is important to measure the impact that PAs have and the role they play.

The next eight topics sit in the medium-low priority cluster based on scores given by the RSC members.

**8. Patient Satisfaction (PA Value):** There are several reasons why this question is important. First, patients drive the healthcare system. Second, patient advocacy groups are important influencers within healthcare. Additionally, employers care about patient satisfaction. And, finally, patient satisfaction may affect patient treatment compliance.



**9. Diversity (PA Workforce):** As a way to remove barriers to care, diversity is strongly associated with access to care, the second high priority area. As the patient population has grown more diverse, it is necessary for the PA profession to reflect that diversity. A diverse health workforce is important in ensuring the delivery of linguistically competent and culturally appropriate healthcare and reducing health disparities. Additionally, it is important to understand the extent to which PAs are trained in cultural competencies.

**10. Future PA Roles (PA Roles):** Knowing future PA roles will help support legislative advocacy efforts and the development of educational models. Additionally, by understanding this question, the profession can further examine workforce issues and delineate resource needs.

**11. PA Adaptability (PA Workforce):** Whether PAs are adaptable to meet workforce needs will suggest added value for the profession. Additionally, the answer can influence policymakers and future needs.

**12. Cost of Education (PA Education):** Research on this topic will provide a basis for cost-effectiveness research and support workforce planning.

**13. PA Role Change (PA Roles):** With future roles in mind, the PA profession needs to know the transition process from current roles to future roles. Also, how PAs' roles change can have implications on PA educational models.

**14. Successful Team Member (PA Roles):** Each team member makes contributions in order to maximize the team's effectiveness. Teams to analyze can include emergency department teams, critical care unit teams, hospitalist teams, trauma teams and surgical teams.

**15. Specialization Trends (PA Workforce):** Use of PAs in specialty practice can influence the availability and distribution of specialty services. Additionally, the answer can influence policymakers and educators.

## Low Priority Research Topics

The last five topics fall in the low-priority cluster based on scores given by the RSC members.

**16. Regulatory Impact on PA Education (PA Education):** Changes in law may affect PA education. For example, certain regulations enforced by the Centers for Medicare & Medicaid Services limit student involvement in care and create barriers to adequate training.

**17. Define Quality PA Education (PA Education):** Because this topic is broad, there are sub-questions that researchers can attempt to answer in order to establish a foundation regarding quality. The PA profession should examine what PA programs teach and how these programs assess student competencies.

**18. PA Faculty (PA Education):** Successful changes to our nation's healthcare system will require the continued expansion of the PA profession. Such expansion will require an increase in qualified faculty to prepare the next generation of PAs. Additionally, since the PA profession does not have a large faculty pool, there will need to be increased recruitment and retention to meet future demands and offset faculty burnout.

**19. PA in Nonclinical Roles (PA Value):** As the PA profession has matured, there remains the need to look at the evolution of the PA role as well as the natural life cycle of the PA. The roles PAs play in administrative and other non-direct patient care activities such as in public health and healthcare leadership, have yet to be studied and widely recognized.


**20. Learning Continuum (PA Education):** There is a need to define minimums for generalist education and to understand how years of experience in clinical practice relate to the amount of training and knowledge that has been gained in the clinical setting. Further, there is a need to understand how continuing medical education contributes to practice outcomes.

# MOVING PA-FOCUSED RESEARCH FORWARD

The National PA Research Agenda was presented to and accepted by the AAPA Board of Directors in February 2011 and has become the first historical document guiding future PA-focused research.

AAPA continues to work closely with the Physician Assistant Education Association (PAEA), the National Commission on Certification of Physician Assistants (NCCPA) and the Accreditation Review Commission on Education for the Physician Assistant (ARC-PA) to develop partnerships in support of PA data sharing and research collaboration.

AAPA has also established the National PA Research Alliance (PARA) as a researchers' network, which serves as a vehicle for AAPA to collaborate with researchers, academics, health workforce interest groups, advocacy partners and policymakers, and coordinate and implement research projects emphasizing the priorities identified by the AAPA National PA Research Agenda. Social media will be used to allow PARA members to network and exchange research ideas and information.



In addition, AAPA will organize research sessions at its annual conferences. These sessions include the PARA annual forum where members summarize accomplishments in major areas of PA-focused research, knowledge gaps and a research plan for the following year. Workshops for PA students and new researchers will also be held to encourage research by students and new researchers. The Research Day Symposium is the major research event at the annual meeting. Through call-for-abstracts, speakers are provided opportunities to share their research work and discuss new research initiatives.

The Academy's intent is that this National PA Research Agenda will be progressively implemented to advance team-based, patient-centered medical care and promote PA workforce research in a systematic, collaborative and coordinated manner.





2318 Mill Road, Suite 1300 | Alexandria, VA 22314

p 703.836.2272 f 703.684.1924

[www.aapa.org](http://www.aapa.org)