

Update to National PA Research Agenda

2019

Table of Contents

Establishing a Framework for a Physician Assistant Research Agenda.....	4
Figure 1. Process for creating the National PA Research Agenda	4
Updating the Framework for a National PA Research Agenda	5
Figure 2. Process for updating the National PA Research Agenda	5
Figure 3. Feedback solicited at LAS and AAPA 2018	7
Table 1. 2019 Summary of the PA Research Agenda.....	8
Table 2. 2011 National PA Research Agenda	8
The Four Pillars of the PA Research Agenda.....	9
PA Value and Impact Research Agenda	9
Research Topics	9
Illustrative Research Questions	9
PA Workforce Research Agenda	10
Research Topics	10
Illustrative Research Questions.....	10
PA Role and Practice Research Agenda	11
Research Topics	11
Illustrative Research Questions.....	11
PA Education Research Agenda.....	12
Research Topics	12
Illustrative Research Questions.....	12
High Priority Research Topics	13
No. 1 Cost-Effectiveness of PAs (PA Value).....	13
No. 2 Patient Outcomes (PA Value).....	13
No. 3 Access to Care (PA Value)	13
No. 4 PA Supply and Demand (PA Workforce).....	13
No. 5 PA Workforce Composition (PA Workforce).....	13
No. 6 PA Readiness to Practice (PA Workforce)	14
Medium Priority Research Topics	15
No. 7 Understanding PA Roles (PA Roles)	15
No. 8 Healthcare Team Outcomes (PA Roles)	15
No. 9 Healthcare Team Dynamics (PA Roles)	15

No. 10 Patient Safety (PA Value).....	15
No. 11 PA Doctorates (PA Education)	15
No. 12 Clinical Sites and Preceptors (PA Education)	16
No. 13 PA Work Settings (PA Roles)	16
Low Priority Research Topics.....	17
No. 14 PA Career Flexibility (PA Workforce)	17
No. 15 Expansion of PA Roles (PA Roles)	17
No. 16 PA Specialization (PA Workforce).....	17
No. 17 Impact of Regulation on PA Education (PA Education)	17
No. 18 Defining Quality PA Education (PA Education).....	18
No. 19 Patient Satisfaction (PA Value)	18
No. 20 Cost of Education (PA Education)	18
Moving PA-Focused Research Forward	19
Research at AAPA Conferences	19
National PA Research Alliance	19
Research Bibliography	19

Establishing a Framework for a Physician Assistant Research Agenda

In March 2010, the American Academy of PAs (AAPA) sponsored a two-day PA Research Summit to begin the process of developing a framework for PA-related research. The summit brought together practicing PAs; representatives from the PA academic and regulatory communities; PAs engaged in research; health services researchers; health economists; and thought-leaders from federal agencies, industry, think tanks and private foundations with a demonstrated commitment to health care delivery and health policy research.

The summit consisted of presentations, discussions and small group work. To foster an environment for creative and critical thinking, the summit's format was designed around open dialog and audience interaction with presenters. The ultimate result of the Research Summit served as a framework for a PA research agenda. The work that came out of the summit highlighted compelling research needs.

The Research Summit highlighted many needs for PA-related research, and participants agreed that developing a framework for a research agenda would be a critical next step. Additionally, most participants agreed that AAPA should provide leadership in the development of an agenda framework and in the implementation of the agenda. A distinction articulated at the summit is that while ***AAPA should undertake a leadership role in the development of a research framework for the profession, neither AAPA, nor any one organization, would be charged with or expected to financially support and/or conduct all research prioritized in the agenda framework.***

Then, AAPA Board of Directors commissioned a Research Steering Committee (RSC) consisting of a panel of nationally recognized experts in health workforce research and chaired by former Rear Admiral Kenneth Moritsugu, M.D.

The Committee convened in November 2010 to formally begin the process of prioritizing topics on the proposed PA research agenda, delineating goals, establishing timelines, and identifying synergies for funding.

At the RSC meeting, subjects of discussion included the value PAs add to the health care 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.

Figure 1. Process for creating the National PA Research Agenda



After in-depth discussions on PA Value, PA Workforce, PA Roles and PA Education at the meeting, a draft of the proceedings was circulated and feedback from committee members was solicited. Then, all members were asked to provide their final personal priority rankings of the 20 research topics by assigning a numerical value between one and twenty to each (with 1 being the highest priority and 20 the lowest). The resulting document was the National PA Research Agenda (See Table 1).

Updating the Framework for a National PA Research Agenda

In 2017, in their role as leaders in development of the agenda framework, AAPA revisited the National PA Research Agenda. The PA workforce had experienced an explosion of new programs from 159 in 2011 to 229 in 2017. PAs were moving into expanded roles and were practicing in every medical specialty. PAs were interested in Optimal Team Practice (or OTP) and pursuing a name change. The discussion on terminal degrees continued and whether a doctorate was needed. As a result of these changes and discussions, it was decided that the Research Agenda should be reviewed, updated, and presented for PAs to use as a document to guide PA research across all areas of workforce and education research.

Figure 2. Process for updating the National PA Research Agenda



Step 1

The review process began with an informal literature review to discover which areas of the original National PA Research Agenda. The purpose was to see what has been learned since 2011 on the topics with the original National PA Research Agenda.

Step 2

Once that was complete, the results were shared with AAPA's Research and Strategic Initiatives Commission (RSI). RSI discussed the merits of each original Research Agenda topic in the current PA environment. They made recommendations for adding, removing, and combining different elements and were asked to prioritize the list. No changes were made at this time.

Step 3

In March 2018, the original National PA Research Agenda was presented to approximately 75 PA leaders at the Leadership and Advocacy Summit. Through an interactive presentation as well as small group discussions these leaders provided their feedback on topics that should stay or be removed, as well as suggested new topics that should be added. They also made notations on the changing priorities of topics. No changes were made at this time.

The results of the feedback were discussed with the RSI, but no changes were made.

Step 4

In May 2018, the original National PA Research Agenda presented to approximately 80 leading PA workforce and education researchers within the US who were attendance at the AAPA 2018 Researchers' Luncheon. Through an interactive presentation as well as small group discussions these leaders provided their feedback on topics that should stay or be removed, as well as suggested new topics that should be added. They also made notations on the changing priorities of topics. No changes were made at this time.

The results of the feedback were discussed with the RSI, but no changes were made.

Step 5

After all the feedback was provided, AAPA developed the Updated National PA Research Agenda which reflected the feedback from over 160 PAs which encompassed PA researchers, educators, advocates, leaders, and clinicians as well as reflected the changing knowledge base for PA research. The results formed the framework for the Summary Updated National PA Research Agenda

Step 6

The Summary Updated National PA Research Agenda was sent to approximately 30 of the original 100 members of the Research Summit and Research Steering Committee to solicit feedback. Their feedback was then integrated into the final Summary Updated National PA Research Agenda.

Step 7

The RSI reviewed the Updated National PA Research Agenda one final time. This document is the results of this two-year long process. Tables 1 and 2 provide a comparison of the 2018 Summary and the Original Summary of the PA Research Agenda. In total, five topics were removed or combined with others and five new areas were established. Prioritizations were also changed.

The purpose of this update was to maintain the spirit of the 2011 National PA Research Agenda while providing an updated framework from which current PA researchers may build their own personal research agenda.

Figure 3. Feedback solicited at LAS and AAPA 2018

PA Value and Impact
Which of the following topics are still relevant to PA value and impact? Select all that apply.

- Cost-effectiveness
- Access to care
- Patient safety
- Patient satisfaction
- PA roles outside care

Comments:
What are we missing?

PA Workforce
Which of the following topics are still relevant to PA workforce? Select all that apply.

- Diversity
- PA flexibility
- Specialization trends
- Composition
- Shortages

Comments:
What are we missing?

PA Role and Practice
Which of the following topics are still relevant to PA roles and practice? Select all that apply.

- Team outcomes
- Medical teams
- Future PA roles
- PA role change
- Successful team member

Comments:
What are we missing?

PA Education
Which of the following topics are still relevant to PA education? Select all that apply.

- Cost of education
- Regulatory impact on education
- Defining quality PA education
- PA faculty
- Learning continuum

Comments:
What are we missing?

Final Thoughts
Is there anything else you think we should consider?
What is one question that you wish that researchers would answer?
Is the Research Agenda relevant to you? Select one.

- Yes
- Perhaps
- No
- Do not know

How can AAPA help disseminate this plan? What would be useful for you?

Table 1. 2019 Summary of the PA Research Agenda

Research Topics	Pillar
High Priority	
Cost-Effectiveness of PAs	PA Value
Patient Outcomes ^{NEW}	PA Value
Access to Care	PA Value
PA Supply and Demand	PA Workforce
PA Workforce Composition	PA Workforce
PA Readiness to Practice ^{NEW}	PA Workforce
Medium Priority	
Understanding PA Roles ^{NEW}	PA Roles
Healthcare Team Outcomes	PA Roles
Healthcare Team Dynamics	PA Roles
Patient Safety	PA Value
PA Doctorates ^{NEW}	PA Education
Clinical Sites and Preceptors ^{NEW}	PA Education
PA Work Settings ^{NEW}	PA Roles
Low Priority	
PA Career Flexibility	PA Workforce
Expansion of PA Roles	PA Roles
PA Specialization	PA Workforce
Impact of Regulation on PA Education	PA Education
Defining Quality PA Education	PA Education
Patient Satisfaction	PA Value
Cost of Education	PA Education

Table 2. 2011 National PA Research Agenda

Research Topics	Pillar	Priority
High Priority		
Cost-effectiveness	PA Value	1
Access to Care	PA Value	2
Composition	PA Workforce	3
Shortages	PA Workforce	4
Medium High Priority		
Team Outcomes	PA Roles	5
Medical Teams	PA Roles	6
Patient Safety	PA Value	7
Medium Low Priority		
Patient Satisfaction	PA Value	8
Diversity	PA Workforce	9
Future PA Roles	PA Roles	10
PA Flexibility	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
Low Priority		
Regulatory Impact on Education	PA Education	16
Defining Quality PA Education	PA Education	17
PA Faculty	PA Education	18
PA Roles Outside Care	PA Value	19
Learning Continuum	PA Education	20

The Four Pillars of the PA Research Agenda

PA Value and Impact Research Agenda

Research on PA Value and Impact should examine intersection of the quality of care and the cost effectiveness of the care that PAs provide within the healthcare systems. What is quality, however? Patient outcomes can refer to the immediate care-related outcomes such as adherence to standard protocols, communication, continuity of care, patient engagement & activation, charting and billing accuracy, timing of service, and impact on teammates' delivery of care. It may also refer to medical outcomes including risk adjusted mortality rates, readmission rates, rates of adverse complications, medical error rates, patient satisfaction and other perceptions, productivity. *Cost effectiveness of care* refers to maintenance of low cost or reduction in cost to deliver care both to the healthcare system as well as the patients. Ideally, optimal PA utilization will lead to better *access to care* and *timeliness of care*, or the ability to receive healthcare when you need it, without lowering *patient safety*; all is done with *patient satisfaction* in mind.

Research Topics

Cost-Effectiveness of PAs (High priority)

Patient Outcomes (High priority)

Access to Care (High priority)

Patient Safety (Medium priority)

Patient Satisfaction (Low priority)

Illustrative Research Questions

How do PAs impact the cost effectiveness of healthcare?

Do PAs provide the same level of care or higher compared to other healthcare practitioners?

How do PAs help address access to care for underserved population (rural, low income, etc.)?

Does the presence of a PA on the healthcare team reduce appointment times?

How does PA utilization affect medical practice liability?

How do patients perceive the quality of care PAs provide?

PA Workforce Research Agenda

Research on PA Workforce should examine not just the demographic *composition* of the PA workforce but also where PAs are practicing as well as what they are practicing. By understanding the state of the current PA workforce in conjunction with the demands of the healthcare systems overall, *PAs career flexibility* means that they may be better positioned to transition between specialties, setting, and locations to meet those changing needs. Furthermore, the number of PA programs continues to rise. There were 142 programs in 2008; 10 years later there were 239 accredited programs. With the growing number of programs comes the growing number of graduates. What does it take to make a new PA *ready to practice*? While there continues to be a shortage of physicians in the US, whether there is a *shortage of PAs* overall or within specialties, locations, or settings is a question that should stay high on the list of priorities.

Research Topics

PA Supply and Demand (High priority)

PA Workforce Composition (High priority)

PA Readiness to Practice (High priority)

PA Career Flexibility (Low priority)

PA Specialization (Low priority)

Illustrative Research Questions

What does the current PA workforce in the U.S. look like? How has the workforce changed over time?

What will the workforce look like in the future – will there be enough PAs to meet demand? What factors drive demand?

Where are PAs working: in what types of healthcare settings? Are PAs working in the areas where they are most needed (e.g., rural, MUAs)?

How many PAs are working in specialty areas versus primary care? What are the trends over time?

How often do PAs switch specialties? What are the most common specialty changes that PAs make, and at what stage of their careers?

PA Role and Practice Research Agenda

Research on PA Role and Practice should examine the changing dynamics of PA Practice. Researchers have a limited *understanding of PA roles* - how they have changed and continue to change is not well documented nor understood.

As PAs advocate for Optimal Team Practice (OTP), there is a great deal of focus on how PAs on teams lead to better *healthcare team outcomes*. Yet very little is known about what *optimal team dynamics* are. Understanding that teams are unique to the individuals on them, is it possible to glean from research how utilizing members on each team can lead to optimal patient outcomes while ensuring each member is utilized to the top of their license and experience. PAs are no longer clinicians and/or educators. They are consultants, business owners, writers, researchers. More research is still needed on the work PAs are doing across *work settings* as their *roles continue to expand* into areas outside of clinical work.

Research Topics

Understanding PA Roles (Medium priority)

Healthcare Team Outcomes (Medium priority)

Healthcare Team Dynamics (Medium priority)

PA Work Settings (Medium priority)

Expansion of PA Roles (Low priority)

Illustrative Research Questions

Are PAs satisfied with their jobs and with their roles in delivering care? What factors influence whether PAs and physicians are satisfied with PA roles and contribution to delivering care?

What are the systems-level factors that influence PA practice? What is the role of quality improvement in reducing practice gaps?

What kinds of care are PAs delivering? In what types of settings are PAs delivering healthcare?

How do medical teams involving doctors, PAs, and other healthcare professionals develop? What are the dynamics of these teams?

How are PA roles expanding? What types of leadership roles are PAs taking on? What types of nonclinical roles are PAs engaged in?

PA Education Research Agenda

The PA education system needs to stay ahead of the changes in order to prepare their graduates for the work that will encounter. As the move to confer graduate level degrees concludes by 2020 and NPs are being conferred with a DNP, the spotlight is bright upon the value of *a PA doctorate*. PAs are watching the NP profession and seeing the tens of thousands of NPs and physicians in need of clinical sites and preceptors. This is placing a tremendous amount of competition for *quality clinical sites and preceptors*. In terms of curriculum, there are several areas that have increased focus for PA research. The first includes understanding how *state and federal regulation affects PA practice* and therefore PA education. In addition, the need to include increasing curriculum into a static amount of time necessitates research on *quality curriculum development* and delivery. After the PAs graduate, many hold tens of thousands in debt from their PA degree. Research is needed to understand how the *cost of PA education* is impacting the diversity of the profession, why PAs practice, and how they practice post-graduation.

Research Topics

PA Doctorates (Medium priority)

Clinical Sites and Preceptors (Medium priority)

Impact of Regulation on PA Education (Low priority)

Defining Quality PA Education (Low priority)

Cost of Education (Low priority)

Illustrative Research Questions

How can faculty best be supported and developed professionally? Is there a need for doctorally-prepared PA educators? What type of training will allow PA educators to best meet the needs to the graduate level students?

How can we increase the number of clinical site and preceptors that are needed to train the healthcare workforces?

How does regulation of the PA profession impact PA education? How will the move toward optimal team practice impact the curriculum needed to prepare students for work after graduation?

What factors define the quality of PA education? Can we ensure that all PA students are obtaining a quality education? What factors influence education quality?

What is the anticipated cost of a PA education in 5 - 10 years? How might this affect demand to enter the profession? Will PAs choose careers that bring the greater remuneration to offset the cost of the education?

High Priority Research Topics

No. 1 Cost-Effectiveness of PAs (PA Value)

Cost-effectiveness research identifies healthcare providers and strategies that contribute to stabilizing healthcare costs and thus benefits consumers, payers 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.

No. 2 Patient Outcomes (PA Value)

Patient outcomes can refer to the immediate care-related outcomes such as adherence to standard protocols, communication, continuity of care, patient engagement & activation, charting and billing accuracy, timing of service, and impact on teammates' delivery of care. It may also refer to medical outcomes including risk adjusted mortality rates, readmission rates, rates of adverse complications, medical error rates, patient satisfaction and other perceptions, productivity. Cost effectiveness of care refers to maintenance of low cost or reduction in cost to deliver care both to the healthcare system as well as the patients.

No. 3 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. Optimal PA utilization will lead to better access to care and timeliness of care, or the ability to receive healthcare when you need it, without lowering patient safety.

No. 4 PA Supply and Demand (PA Workforce)

The answer to this question is important in order to project future needs and to address assumptions about shortages in the PA profession. While there continues to be a shortage of physicians in the US, whether there is a *shortage of PAs* overall or within specialties, locations, or settings is a question that should stay high on the list of priorities.

No. 5 PA Workforce Composition (PA Workforce)

Maintaining a contemporary as well as historical look at the PA workforce is important because as the patient population has grown increasingly more diverse, it is necessary for the PA profession to grow accordingly. 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.

No. 6 PA Readiness to Practice (PA Workforce)

The number of PA programs continues to rise. There were 142 programs in 2008; 10 years later there were 239 accredited programs. With the growing number of programs comes the growing number of graduates. What does it take to make a new PA ready to practice? What curriculum is needed to ensure that PAs can practice medicine once credentialed? How much training is needed to continue to grow their skills once in the workforce and how long should training last?

Medium Priority Research Topics

No. 7 Understanding PA Roles (PA Roles)

The PA profession is now over 50 years old. PAs are practicing in every specialty, in every setting. Despite this, the roles PAs play within a setting remain elusive to both their employers as well as the public. More research is needed to outline how PAs are working, and how it varies by a myriad of factors.

No. 8 Healthcare Team Outcomes (PA Roles)

Our healthcare system is one that relies on team-based care in more and more settings. Yet little is understood about the types of teams that exist and the resulting patient care outcomes. This topic is important because it will help healthcare teams to optimize their value to individual patients and the healthcare system in its entirety.

No. 9 Healthcare Team Dynamics (PA Roles)

It is important to know how each team member contributes 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. By examining team dynamics, researchers can determine which factors are shared by the most effective teams.

No. 10 Patient Safety (PA Value)

This topic is critical because ten 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 and society overall, it is important to measure the impact that PAs have and the role they play.

No. 11 PA Doctorates (PA Education)

In 2004, the American Association of Colleges of Nursing recommended that the doctoral degree become the standard degree for NPs by 2015. For PAs, all currently accredited programs must begin conferring a graduate degree (i.e., a master's degree) by 2020. This disjoint between the terminal NP degree and PA degree has led to a debate in what the terminal PA degree should be and what the value of a doctoral degree should be to a PA. In addition to the debate on the terminal degree for clinically practicing PAs, there is a debate on the need for doctorally-prepared PA educators and what that training should look like.

No. 12 Clinical Sites and Preceptors (PA Education)

As the number of PA graduates is expected to top 10,000 by 2020; there are over 32,000 NP graduates and over 20,000 medical students by 2020. There is a great deal of competition for clinical sites and preceptors as the number of students continues to rise. Research on how to increase the clinical site and preceptors is needed to better understand how to meet the needs of the new healthcare workforces.

No. 13 PA Work Settings (PA Roles)

The PA profession is a nimble profession. Through their generalist training comes the ability to train in multiple specialties throughout their career. This is unique to the PA profession when looking across all healthcare careers. PAs are serving as clinicians, preceptors, educators, leaders, consultants, researchers. They work in every specialty and are in every setting. This topic is important because if PAs are mobile, then it suggests flexibility and added value for the profession. Observing trends in specialization as well as gaining understanding in what it means for a PA to utilize this flexibility can influence policy makers and determine how PAs may meet future healthcare needs.

Low Priority Research Topics

No. 14 PA Career Flexibility (PA Workforce)

The PA profession is a nimble profession. Through their generalist training comes the ability to train in multiple specialties throughout their career. This is unique to the PA profession when looking across all healthcare careers. PAs are serving as clinicians, preceptors, educators, leaders, consultants, researchers. They work in every specialty and are in every setting. This topic is important because if PAs are mobile, then it suggests flexibility and added value for the profession. Observing trends in specialization as well as gaining understanding in what it means for a PA to utilize this flexibility can influence policy makers and determine how PAs may meet future healthcare needs.

No. 15 Expansion of PA Roles (PA Roles)

The PA profession is now over 50 years old. 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 areas outside of direct patient care have yet to be studied and widely recognized, for example in areas such as public health and healthcare leadership. Observing trends in PA roles as well as understanding in PA career evolution may allow for greater career opportunities for PAs in the future.

No. 16 PA Specialization (PA Workforce)

The PA profession is a nimble profession. Through their generalist training comes the ability to train in multiple specialties throughout their career. This topic is of importance as we have seen the specialization trends among PAs changing over time. Observing trends in specialization as well as gaining understanding in what it means for PAs to utilize this flexibility can influence policy makers and determine how PAs may meet future healthcare needs.

No. 17 Impact of Regulation on PA Education (PA Education)

There are current changes in law that may affect PA education. For example, the Centers for Medicare and Medicaid Services' recent changes in reimbursement limit student involvement in care and create barriers to adequate training. Further, by understanding how regulation impacts education, the profession will be able to address in a more informed manner how plans for specialty certification and proposed changes to maintenance of certification could be affected.

No. 18 Defining Quality PA Education (PA Education)

The PA profession should examine what PA programs teach, how they teach it, and how these programs assess student learning and competencies. The Accreditation Review Commission on Education for the Physician Assistant (ARC-PA) defines the standards for PA education. Beyond the standards set out by ARC-PA there remains the need to evaluate specific content that PA programs may use, modes of delivering content to students, and whether content needs to develop as the PA profession develops. Because this topic is broad, there are countless questions that researchers can attempt to answer in order to establish a foundation regarding quality.

No. 19 Patient Satisfaction (PA Value)

Patient satisfaction is a common measure of the patient experience nowadays. The Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) is a national survey of patient experiences and is posted online for consumer to use when vetting hospitals. Press Ganey, a consulting company, holds the greatest market share on surveying hospitals' patients on their patient experience, resulting in a score for providers and facilities. Why is this 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 impact patient treatment compliance. With this comes the understanding the patients cannot always be satisfied. This precarious balance of optimal treatment and outcomes with patient satisfaction is one that needs further research.

No. 20 Cost of Education (PA Education)

With tuition in 2018 as high as \$180,000 for a PA program, considering the return on investment for a PA education is paramount, especially when considering the need for greater diversity with the profession. Is the entry into the profession serving as a barrier to otherwise highly qualified individuals interested in the profession? Does debt load lead to PAs focusing on one specialty or another as they seek greater income to offset their student loan debt. Research on this topic will provide a basis for cost-effectiveness research and will support workforce planning.

Moving PA-Focused Research Forward

Research at AAPA Conferences

AAPA will also organize multiple research sessions at the AAPA annual meetings. These research sessions include PARA annual forum where members summarize accomplishments in major areas of PA focused research, knowledge gaps and research plan for the following year. Workshop for PA students and new researchers will also be held to encourage research in students and new researchers. Research Day Symposium is the major research event at the annual meeting. Both plenary speakers and contributed speakers through call-for-abstracts are provided opportunities to share their research work and discuss new research initiatives. In this way, National PA Research Agenda will be implemented step-by-step and PA workforce researchers across the profession will conduct research in a systematic, collaborative and coordinated way.

National PA Research Alliance

AAPA had 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 policy makers and coordinate and implement research projects emphasizing the priorities identified by the National PA Research Agenda. Social media will be used facilitate PARA members to network and exchange research ideas and information.

The PARA has not been active since at least 2015.

Research Bibliography

AAPA was tasked at the Research Summit of maintaining a Research Bibliography. AAPA will continue to expand and maintain this bibliography and create periodic updates, utilizing the National PA Research Agenda topics as key word identifiers.