Physician Assistant Educator Competencies

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Abstract The rapid expansion of physician assistant (PA) programs over the past decade has led to a shortage of experienced PA faculty. This has prompted many faculty development initiatives to help provide the skills needed by new faculty making the jump from clinical practice to academia. Faculty development is a key necessity in health professions education because many of the professionals attracted to the educator role are primarily trained as clinicians. Although this issue has been extensively evaluated by our colleagues in medical, nursing, and health education and various faculty development interventions have been implemented, this has not been done in the PA profession. In an effort to correct this, the Physician Assistant Education Association assembled a task force of experienced PA educators and charged them to evaluate the literature on faculty competencies in health professions education and to develop a set of PA educator competencies to help codify the essential knowledge, skills, attitudes, and behaviors that faculty need to be successful in their academic roles.

The task force met its charge by engaging in an extensive review of the literature, developing a competency framework and proposed competencies, and soliciting the input of a diverse panel of experts in PA education to vet the proposed competencies. Using the insights and recommendations from the expert panel, the task force refined the competencies—resulting in the framework of PA educator competencies presented in this document.

INTRODUCTION

Over the past 10 years, there has been rapid growth in the number of physician assistant (PA) programs. In 2007, there were 134 accredited programs in the United States. Today, there are 236 (as of August 2018), with another 60 or so programs seeking provisional accreditation by 2020.[1] This growth rate of nearly 70% over a decade places intense pressure on new and existing programs to attract, recruit, mentor, and retain the approximately 4 to 8 full-time faculty members needed for each program.[2] Attracting PA faculty with teaching experience in this environment is particularly difficult and is one of the top 3 barriers, along with salary and lack of qualified candidates, that PA programs face when attempting to hire new faculty.[2]

These pressures have led to many new faculty members lacking some or all of the fundamental competencies of the PA educator. The Physician Assistant Education Association (PAEA), through its Faculty Development Council (FDC), and now the Faculty Development Mission Advancement Commission (MAC), has been working to support its member programs in addressing this issue by offering ongoing faculty development opportunities and best practices through its workshops and the annual Education Forum. The Association is also making significant investments to enhance and expand the number and type of its faculty development offerings, including adding a series of regional education meetings across the United States and developing an online learning management system.

However, to drive these faculty development initiatives in a systematic way, we need to have a clear idea of what PA educators need to know—we need a set of competencies specifically for the PA educator. Accordingly, in 2013, the PAEA Board of Directors charged the FDC to identify competencies that faculty needed to develop across the career spectrum, from novice to expert, based on the specific roles available to faculty in PA programs. The Board asked the group to identify the competencies required for effective teaching, scholarship, and leadership in PA education. Once developed, the Association planned to use the competency framework to map the Association's existing products and services and identify additional resources needed to help faculty develop the competencies.

The FDC discussed the potential for the competencies to have unintended consequences, particularly in the absence of clear guidelines for their intended use. The council was concerned about the possibility of the competencies being used to make decisions related to promotion and tenure—something the group agreed would be a misuse of the resource. The scope of the project grew, and as a result, a dedicated task force was established to further explore the issue of faculty competencies, including their appropriate and intended use.

1. Develop a set of competencies for PA educators, including through review of existing competency frameworks and revising or adapting these to meet the needs of PA educators.
2. Consider the impact of establishing competencies on the promotion and tenure process.
3. Determine how the competencies could be helpful in codifying some of the Association's faculty development work.

COMPETENCIES IN THE HEALTH PROFESSIONS

About 2 decades ago, the US medical education system struggled with identifying the skills and knowledge base that a competent physician needed to demonstrate in order to

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practice medicine.[3–5] This issue rose to the surface because of 3 main factors: inadequate clinical training to prepare the physician workforce for a more diverse and aging population, increased scrutiny and accountability regarding patient safety, and the move toward value-based health care, which relies on measurement of health outcomes. The result was recognition of a need for competencies and competency domains for physicians, such as practice-based learning and systems-based practice.[3–5]

The growing demand for an accountability system in medical education was first developed for educating residents; this was a competency framework for graduate medical education known as the Accreditation Council for Graduate Medical Education (ACGME) Outcome Project.[3–5] This use of a competency framework soon expanded to other areas of education and training, including medical didactic education and medical clinical training.

Though competencies initially focused primarily on learners, the need to clearly define the knowledge and skills required of those who educate aspiring health care professionals was soon recognized as important. Competencies have been developed for graduate and postgraduate[6,7] science educators, nursing educators,[8] and physician educators[3] as well as for health services research[9] and a number of other professions, such as pharmacy,[10] dentistry,[11] and veterinary medicine.[12]

The PA profession seeks to join these other professions in codifying educator competencies and using them to enhance its faculty development and mentoring initiatives to develop instructional leaders. Several national groups, such as the National League of Nursing and the National Athletic Trainers' Association, have developed conferences, workshops, and forums for teaching the teacher, and in 2009, the National League of Nursing began offering a Certification for Nurse Educators. Similarly, the Association of American Medical Colleges developed "Faculty Forward," a program to help academic medical centers attract, train, and retain faculty and staff.[13]

The Need for PA Educator Competencies

Approximately half of new PA faculty enter academia directly from the clinical setting,[14] and the majority report having very little, if any, teaching or academic experience.[15] In all health professions, this lack of previous experience in academia means that many new faculty are unprepared for their roles as educators, researchers, and scholars.[15] These unprepared faculty are expected to navigate the complexities of academe, including curriculum design and development, assessment, evaluation, student advising, and incorporating adult learning theory and methodology, without the necessary knowledge and skills to do so. Too often, faculty must learn on the job while they are immersed in delivering the curriculum. At a minimum, faculty need to be provided a set of competencies that clearly articulates the knowledge, skills, behaviors, and attitudes that are essential to the practice of teaching and other aspects of an academic career.

IDENTIFYING A COMPETENCY FRAMEWORK

Competency frameworks help guide the design and delivery of faculty development programs and activities aimed at different levels of educational responsibility, address societal expectations for teachers' and learners' competence, and buttress the role of the teacher in medical education.[15,16]

According to Milner, a competency framework for health professions education should include common competencies that apply to faculty working in a variety of settings and institutions and holding a variety of responsibilities.[17] Competencies should also be developmental and allow faculty to display different levels of expertise in various competency domains at different stages of their careers.[17] Finally, competencies should be measurable.

Developing a Framework for PA Educator Competencies

To develop a framework for PA educator competencies, the task force began with a collaborative review of the literature and consideration of the competency domains that might adequately describe the actions and attitudes of a PA educator. We used a cross-classification method to develop a competency framework for PA educators. We searched for competency frameworks with an emphasis on resources containing these terms: medical faculty, competencies for medical educators, educator competencies, and faculty competencies. These search efforts resulted in the selection of 6 frameworks for in-depth review, based on the following factors:

1. Relevance to medical educators
2. Emphasis on teaching faculty in the health professions
3. Diversity of medical education domains

Because the task force modeled the domains after those used in most of the health professions, an initial draft of the framework included a medical knowledge domain. However, after further discussion and recommendations from experts, the group decided to eliminate this domain. We agreed that all PA educators must, of course, possess the content knowledge required for the subjects they teach but felt that this knowledge fits better as a competency in the domain of teaching.

After reviewing the 6 potential frameworks, the task force agreed that the competency framework proposed by Srinivasan et al[18] would best serve as the foundation for the PA educator competencies. This decision was based primarily on the fact that Srinivasan's framework emphasizes teaching as its primary focus and distinguishes competencies required for medical students from those required of medical educators, while drawing parallels to the ACGME competencies, which highlight the interconnectedness of student and educator competencies. The task force also appreciated the separation of the competencies into 2 categories, core and specialty.

The Srinivasan Competency Framework

The competency framework developed by Srinivasan and colleagues was based on an extensive review of the literature (more than 800 articles) on teaching and learning, as well as on expert opinion—solicited through a conference of medical educators, through discussions during regional and national presentations, and through individual discussions with experts in the educational arena. The conference participants

developed an initial framework based on qualitative analysis of identified themes that incorporated the ACGME competencies and the Royal College of Physicians and Surgeons of Canada CanMEDs Project's medical education directives for specialists.

Over the next few years, the framework was developed and refined to answer the following 5 questions:

1. Does every person who teaches need educational training?
2. Are there foundational principles in medical education?
3. Which skills are considered core versus specialized for different types of educator responsibilities?
4. Which terms best express the continuum of educator skills development?
5. Should we be assessing teaching or learning?

Based on the responses to these questions from medical educator and practitioner "discussants," and using the ACGME framework as a starting point, the Srinivasan group identified 10 medical educator competency domains (which they referred to as "content areas"). Six of these were deemed core content domains, appropriate for all medical educators:

1. Medical or Core Content Knowledge
2. Learner-Centeredness
3. Interpersonal and Communication Skills
4. Professionalism and Role-Modeling
5. Practice-Based Reflection
6. Systems-Based Practice

Four specialized competency domains for faculty with additional roles were also identified:

7. Program and Curriculum Design and Implementation
8. Evaluation in Scholarship
9. Leadership
10. Mentorship

To each content domain, Srinivasan and colleagues assigned specific underlying knowledge, skills, and attitudes, resulting in the framework that the task force used as the basis for our work.

BUILDING THE PA EDUCATOR COMPETENCIES

The task force ultimately identified 5 core competency domains, 4 of which were adopted from Srinivasan's framework: teaching, learner-centeredness, interpersonal and communication skills, professionalism and role-modeling, and systems-based practice. The core competency domains and related competencies are applicable to all PA educators, regardless of role and experience.

We also identified 5 specialized competency domains: program and curriculum design and implementation, program evaluation, scholarship development, leadership, and mentorship. These 5 domains closely resemble those used by Srinivasan, with the addition of curriculum design and implementation and scholarship development. Specialized competencies require experience and expertise beyond the core competencies and are more broadly applicable at the program leadership level versus the teaching faculty level. Following development of this framework and the domains, we used the cross-walk we had done of the various competencies in the competency frameworks reviewed, combined with contributions from educators on the task force, to develop a total of 59 competencies across 9 competency domains.

Table 1. Survey Respondents by Position

Survey Respondents	Number	Percentage of Total Respondents
Program director	24	31
Didactic faculty	16	21
Academic coordinator	12	15
Clinical coordinator	7	9
Other	7	9
Research director	6	8
Medical director	5	6
Clinical faculty	1	1

Evaluation of the Draft Competencies

To evaluate the initial draft of the PA Educator Competencies, we used a modified Delphi method[19,20] because it identifies confluences and divergences of expert opinion and has been effectively used for the construction of medical educator competencies in other frameworks.[18] Using a list of faculty from the PAEA faculty directory, each member of the group identified 5 PA education experts for each of the following 7 PAEA-defined roles: program director, medical director, academic coordinator, clinical coordinator, didactic faculty, research director, and clinical faculty, across each of the 4 geographic regions: northeast, south, west, and Midwest. PAEA staff collated the results into a comprehensive list.

A total of 195 experts were identified, and an email containing the survey and competencies was sent to each one. Seventy-eight completed surveys were received, for a 40% response rate. Table 1 shows the breakdown of respondents.

The mean number of years that respondents had been in PA education was 3.92 years (median = 4 years; standard deviation = 1.3 years), and 63% had worked in PA education for 8 years or more.

Overall, the draft was well received by the survey respondents, who thought the competencies were well organized with no redundancy in the list of competency domains and no missing domains. The task force used the survey feedback to refine the competencies.

Refining the Competencies

The earliest drafts of this model had identified 2 sets of competency domains—"core" competencies and "specialized" competencies—drawn from the Srinivasan framework. However, feedback from the PAEA membership (the expert survey, as well as discussion panels during PAEA education forums) revealed concerns about these identifiers and how the 2 sets of domains would be interpreted by PA educators. Based on this feedback, the task force changed the names of the domain groupings from "core" to "foundational" and from "specialized" to "functional." These descriptors have been used in other health profession competency models.[17,21]

The expert survey also provided the following more detailed feedback, which was incorporated into the document as follows.

Foundational Competency Domains

Teaching. Additional concepts identified in the survey included using learning educational theory to design teaching, course development based on outcomes that support the program mission and goals, promoting learner autonomy, using interprofessional education, and proficiency in instructional technology.

Learner-Centeredness. Clarifying language was added to qualify the type of support provided to the learner as either academic support or directed toward learner wellness.

Interprofessional and Communication Skills. Minimal clarifying grammatical changes were suggested and adopted for this domain.

Professionalism and Role-Modeling. Language was added to reflect the need for continuous professional development.

Systems-Based Learning. Multiple reviewers thought the Systems-Based Learning domain was distinctly different from the ACGME Systems-Based Practice domain, which speaks directly to the way a clinician's practice accounts for concepts such as cost-effective care, resource allocation, patient safety, and clinical data systems. Although PA students must learn about health care systems and how to practice medicine within those systems, the learning does not necessarily need to be based on systems. Thus, the term "systems-based learning" did not seem to capture the concept of "learning about systems-based practice." The competencies under this domain were therefore incorporated into the Teaching and the Curriculum Design domains, and we decided to remove the Systems-Based Learning domain, reducing the core competencies to 4 in total.

Functional Competency Domains

Program and Curriculum Design and Implementation. Language focused on learning outcomes, as well as input from content, delivery, and technology experts, was added to this domain.

Program Evaluation. Three additional competencies were added: implementing established quality improvement techniques, using valid outcome measurements to determine need for improvement, and understanding accreditation standards.

Scholarship Development. No substantial changes were made to this domain.

Leadership. This domain was condensed and streamlined; it originally contained by far the most competencies listed.

Mentorship. No substantial changes were made to this domain.

The final set of competency domains captures the general skills expected of a PA educator. It is understood that the PA educator, who is or has presumably been a clinician as well, has already achieved the professional competencies of their clinical discipline and is proficient in their area of clinical practice. Physician assistant educators from nonclinical professional backgrounds, eg, anatomy, physiology, medical informatics, or educational assessment, are assumed to be proficient in the competencies identified by their respective professional organizations.

The competencies described here are directed toward the unique role of an educator in a PA curriculum and are different from the competencies adopted and approved for the PA profession by the 4 PA professional organizations (National Commission on Certification of Physician Assistants, American Academy of PAs, Accreditation Review Commission on Education for the Physician Assistant, and PAEA).

SUMMARY OF THE PA EDUCATOR COMPETENCIES

The 4 foundational competencies focus on the basics of teaching, learning, communication, and professionalism—skills that all PA educators should strive to achieve. The 5 functional competencies identify specialized skills that may require experience and expertise beyond the foundational competencies. Depending on the additional program roles of the educator, some or all of the functional competencies may apply. Our proposed model allows for flexibility to incorporate competencies from this framework into a variety of PA educator roles at different institutions. Table 2 summarizes the 9 competencies.

APPLICATION OF THE PA EDUCATOR COMPETENCIES TO FACULTY DEVELOPMENT

This competency framework is designed to provide a contextual resource for PA faculty development that can be referenced by PA faculty and program administrators across the spectrum of academic experience. These competencies should foster discussion about skills and qualifications for a given faculty role, encourage increasing teaching expertise to improve student learning, and foster faculty confidence and ultimately faculty retention. The competencies can be used to

Table 2. Physician Assistant Educator Competencies

Foundational Competencies
Teaching: Using educational theory and evidence-based literature to design teaching and evaluation practices that challenge and facilitate learners to practice high-quality, compassionate patient care.
Learner-centeredness: Focuses on the educator's personal commitment to learners' professional success, well-being, and growth.
Interpersonal and communication skills: Directed at educator-level implementation of effective communication styles.
Professionalism and role-modeling: Includes demonstrating appropriate professional behaviors and inspiring excellence in learners and peers.
Functional Competencies
Program and curriculum design and implementation: This is the first functional competency because it is critical to consider the factors associated with implementation when designing curricular elements across a program.
Program evaluation: Specifies that the educator uses scholarly and practical approaches to ensure that the program is evaluated in a way that creates new knowledge about the program and the process.
Scholarship development: PA educators may also participate in a variety of scholarly activities that promote the profession, build its body of knowledge, and build academic capital for promotion and tenure.
Leadership: Defines a good leader as an individual who is able to build a shared vision for growth, manage the process of change, and develop the next generation of leaders.
Mentorship: Describes skills that sustain a positive focus on professional growth of individuals (learners, faculty, and staff) to optimize potential.

guide faculty development curricula in a progressive manner within PA programs and to inform programming at regional and national conferences. They may also be used by faculty as a way to self-assess their own competence in the 9 domains and to identify where resources are needed to help acquire specific competencies.

Considerations and Cautions

The framework presented here is intended to provide a common language for communicating among PA educators about professional development. It is not meant to be a set of strict criteria or a checklist for formal faculty evaluation and promotion. Given that these competencies are a first attempt to codify the knowledge, skills, and attitudes of PA educators, we urge programs to use these as a guide for faculty development rather than a prescriptive list against which to determine educator competence. A more robust plan, including how to assess degree of competence and faculty development resources aimed at addressing specific deficits, is needed before decisions related to promotion and tenure should be considered. It is also imperative that each institution defines its own internal methods of faculty assessment, including for mission-specific knowledge and skills.

We also recognize that if the PA educator competencies are to remain relevant, it is essential that they continue to undergo a rigorous peer-review process through membership feedback and endorsement. As Milner notes, "A competency framework is essentially a hypothesis that predicts specific outcomes—faculty members who possess or acquire the defined competencies are most likely to be successful. As with any hypothesis, the framework must be tested and continually refined."[17] We encourage the PAEA Faculty Development MAC to develop an appropriate evaluation mechanism to measure the effectiveness of the competency framework.

We also encourage additional research on competencies and related issues—research opportunities abound in the areas of PA and interprofessional faculty development; the application, modification, implementation, and evaluation of educator competency frameworks; and longitudinal analysis of diverse educator goals and objectives.

PA EDUCATOR COMPETENCIES

1. Teaching

Use learning educational theory and evidence-based literature to design teaching and evaluation practices that challenge and facilitate learners to practice high-quality, compassionate patient care.

- 1.1 Demonstrate content knowledge in area of expertise to help learners apply the established and evolving knowledge needed for effective patient care.
- 1.2 Demonstrate the ability to develop a cohesive and well-coordinated course based on clear course goals, objectives, and outcomes that support the program mission and goals.
- 1.3 Using valid methods, assess learner progress in acquiring knowledge, skills, and attitudes aligned with the stated course goals and objectives.
- 1.4 Provide, select, and recommend resources to supplement and enhance learners' understanding of medical knowledge. Promote learner autonomy in identifying resources and support.
- 1.5 Identify and use internal and external resources to improve medical education, advocate for learners, and provide optimal teaching and learning.
- 1.6 Design learning experiences and opportunities that use a variety of instructional methodologies that cultivate critical thinking skills.
- 1.7 Reflect during and after educational interactions and actively seek input and feedback about the quality and effectiveness of teaching from multiple sources, including learners.
- 1.8 Use feedback and self-assessment to identify teaching strengths and weaknesses to modify techniques and improve educational outcomes.
- 1.9 Recognize and use the concepts of interprofessional education.
- 1.10 Demonstrate proficiency in computer skills and instructional technology.

2. Learner-Centeredness

Demonstrate a commitment to learners' success, well-being, and growth into the professional role.

- 2.1 Demonstrate respect, sensitivity, and responsiveness for each learner, as an individual, being mindful of privacy, autonomy, diversity, and professional boundaries.
- 2.2 Value all learners' contributions to the learning environment to stimulate learner responsibility and facilitate cooperation and collaboration.
- 2.3 Invest in each learner's growth and skill development, being cognizant of the learner's prior knowledge and unique needs to overcome barriers and provide feedback to improve learning.
- 2.4 Identify competing demands and factors that may cause stress for each learner.
- 2.5 Provide educational and wellness support by connecting the learner to the appropriate resources within the educational community.

3. Communication Skills

Use effective communication styles.

- 3.1 Engage in active listening, foster open dialogue, and participate in problem-solving as a member of a team.
- 3.2 Facilitate dialogue and understanding, especially during times of conflict.
- 3.3 Understand and identify how diversity and inclusion influence communication styles and impact professional relationships.

4. Professionalism and Role-Modeling

Demonstrate appropriate professional behaviors inspiring excellence in learners and peers.

- 4.1 Adhere to ethical principles demonstrating compassion, integrity, and respect.
- 4.2 Model professional practice standards including, but not limited to, maintaining appropriate licenses, credentials, and faculty development activities.
- 4.3 Develop and implement professional goals based on continuous self-assessment.

4.4 Exercise an awareness of stressors that may negatively impact personal and professional well-being; access appropriate resources.
4.5 Participate in service activities that are connected to the profession or the institution's mission.
4.6 Collaborate with other health professionals to promote and maintain a climate of mutual respect.
4.7 Participate in continuous professional development.

5. Program and Curriculum Design and Implementation

Design and implement sustainable educational programs.

5.1 Apply major theories of education in program design and implementation and seek additional training to stay abreast of educational best practices.
5.2 Use a deliberate, thoughtful approach to curricular development, being cognizant of advances in instructional modalities and emerging technologies.
5.3 Anticipate how societal, medical, and educational trends may affect the profession and plan for curricular innovations to address those needs.
5.4 Conduct needs analyses and craft and prioritize learning goals and objectives that support defined professional competencies with input from institutional expertise, including content, delivery, and technology experts.
5.5 Invest in staff and faculty training to facilitate specific programming.
5.6 Anticipate implementation barriers, such as lack of institutional support, and develop a plan to address these challenges involving key stakeholders.
5.7 Ensure program relevancy by revising curriculum based on outcomes and feedback from internal and external stakeholders.
5.8 Begin succession planning during implementation to ensure continuity if a key educator becomes unavailable.
5.9 Provide timely feedback to key stakeholders to ensure accountability and to encourage collaborative innovation.
5.10 Provide learners with graduated responsibilities based on their abilities.

6. Program Evaluation

Use scholarly and practical approaches to ensure program evaluation in a way that creates new knowledge about the program and the process.

6.1 Implement established quality improvement techniques.
6.2 Use valid outcome measurements to determine need for curricular improvement.
6.3 Ensure continuous program evaluation by key stakeholders.
6.4 Identify evaluation modalities most likely to capture key learning outcomes.
6.5 Identify questions unanswered by program implementation and evaluation and plan for next steps.
6.6 Understand accreditation standards and apply them to the curriculum.

7. Scholarship Development

Participate in scholarly activities that promote the profession, build its body of knowledge, and build academic capital for promotion and tenure.

7.1 Participate in professional societies and network with peers.
7.2 Design and implement research and scholarly activities within an established area of expertise.
7.3 Demonstrate skill in proposal writing for initiatives that include, but are not limited to, research, resource acquisition, program development, and policy development.
7.4 Communicate research results to professional audiences by peer-reviewed abstracts, posters, oral presentations, and publications.

8. Leadership

Create a collaborative culture that inspires others to embrace a shared vision.

8.1 Inspire commitment and vigorous pursuit of a clear and compelling vision, stimulating higher performance standards.
8.2 Anticipate future changes in medicine, population health needs, society, and education that will affect the profession.
8.3 Recruit, develop, and retain the next generation of educational leaders and actively engage in succession planning.
8.4 Create and promote opportunities for faculty and staff that lead to skills development and leadership roles.
8.5 Create a system that recognizes and rewards those who meet or exceed goals and remediate those who do not meet appropriate benchmarks.
8.6 Create and sustain organizational systems that are resilient, flexible, capable of change, accountable, and balanced between stability and growth.
8.7 Articulate an understanding of administrative, legal, and financial structures of the program and institution and of the external organizations that govern medicine and research.
8.8 Manage budgets and resources to achieve programmatic goals and raise funds from internal and external sources, concordant with institutional values.
8.9 Create a culture of safety and trust in which feedback is encouraged and used to evolve programs.
8.10 Demonstrate proficiency in accreditation standards and maintain a system to ensure proper documentation.

9. Mentorship

Sustain a positive focus on professional growth of individuals (learners, faculty, and staff) to optimize potential.

9.1 Articulate expectations of the mentor–mentee relationship.
9.2 Provide support and encouragement for individuals to develop needed skills through collaboration, feedback, and apprenticeship.
9.3 Advocate for mentees, by identifying and creating key networking opportunities.
9.4 Identify or develop resources for individuals to prepare them for professional success.

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