

October 2021

Measuring the Quality of Postgraduate Physician Assistant Fellowship/Residency Programs with a Surgical Focus

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Recommended Citation

Davies, L., Guarino, J., Justus, C., Mueller, C., Krasnosky, R., Rodriguez, J., & Giardino, A. P. (2021). Measuring the Quality of Postgraduate Physician Assistant Fellowship/Residency Programs with a Surgical Focus. *Journal of Nursing & Interprofessional Leadership in Quality & Safety*, 4 (1). Retrieved from <https://digitalcommons.library.tmc.edu/uthoustonjqualsafe/vol4/iss1/3>

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Measuring the Quality of Postgraduate Physician Assistant Fellowship/Residency Programs with a Surgical Focus

Abstract

Introduction

Postgraduate programs for PAs provide formal postgraduate training for clinical specialty areas. These programs are intended to provide intense specialty training in various fields, as well as to standardize education beyond the entry level. The purpose of this descriptive study was to determine if there are consistent trends or clear differences in program length, approach to training, validation of learning, and accreditation through the Accreditation Review Commission on Education for the Physician Assistant (ARC-PA) for postgraduate programs with a surgical focus in the United States.

Methods

This study is a non-experimental and descriptive research design. Program directors were mailed a survey consisting of questions about program information, prerequisites, curriculum, training, evaluation, and perspective of graduates after completion of program.

Results

Of the 29 program directors who were mailed a survey, 62% responded with completed surveys (n=18). 38% of respondents (n=11) stated the annual salary ranged from \$40,000 to \$60,000. Five programs were accredited by the ARC-PA and four programs were actively seeking accreditation. The majority of program directors believed the attitude of the medical community is higher towards PAs who complete a postgraduate education program.

Conclusion

As postgraduate programs increase in popularity, it is important to evaluate the standardization of the programs nationally. Papers like this will help drive a consistent approach to PA fellowship development and evolution. As healthcare evolves, there is a need to develop highly specialized physician assistants and place a premium on retaining them within the healthcare systems. Obtaining information on standard practices across postgraduate PA programs helps determine what requirements should be upheld nationally.

Keywords

Physician assistant, postgraduate training, physician assistant training, physician assistant education

Authors

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Introduction

Physician assistants (PAs) are vital members of America's healthcare workforce, and their scope of practice has drastically changed over the past 40 years. Since the early 1970s, postgraduate programs for PAs have been developed for PAs who desired formal postgraduate training prior to joining a new specialty area of their choice. These programs are intended to provide intense specialty training in various fields, as well as to standardize education beyond the entry level.

The purpose of this study is to describe and analyze trends and differences in characteristics of postgraduate surgical programs for PAs such as program length, approach to training, validation of learning, and accreditation. This was accomplished through a survey completed by the directors of surgical postgraduate physician assistant programs in the United States. Survey questions assessed pertinent aspects of their postgraduate program in order to help obtain the goals of this research project.

Background

Postgraduate programs vary in length, specialty, number of participants, and approach to and assessment of skills obtained. A 2007 study looked at the salaries of residency-trained graduates as compared to informally trained-on-the-job surgical PAs to evaluate job satisfaction, training satisfaction, and employment characteristics (Brenneman et al., 2007). Other descriptive studies did not focus on surgery but rather postgraduate education as a whole. For example, Wiemiller et al. (2008) evaluated all postgraduate training programs across the United States and summarized emerging trends and opportunities, compensation to the PA trainee, length of program, benefit breakdown, and curriculum breakdown. Additionally, a descriptive study that evaluated postgraduate PA programs from the director's perspective compared general characteristics of PA residency programs, program admissions, program finances, compensation and personnel, program curriculum, and program director opinions regarding PA residency education (Asprey & Helms, 1999). No recent studies attempted to assess didactic training and supervised clinical experience of all existing postgraduate PA training with a surgical focus.

Methods

This study uses a descriptive, non-experimental research design. The authors developed a survey that asked directors of each surgical PA program to define and describe specific characteristics of their PA postgraduate program. The surveys were sent by mail to program directors of the surgical PA fellowship programs in the United States (U.S.) (n=29) as of 2014. The identification of program directors of PA surgical postgraduate programs was based on the individual associated with each respective program from a public list of programs available on the Association of Postgraduate Physician Assistant Programs (APPAP) website (APPAP, 2014). The survey questions were based on previously researched objectives (Wiemiller et al., 2008) and new measurements of interest, and included quantitative and qualitative questions addressing program information, prerequisites for matriculation, curriculum, training, evaluation processes, and perspective of graduates after completion of program.

The initial mailing packets sent to program directors included a cover letter and survey. The packet also included a token of appreciation in the form of a reference card listing normal pediatric vital signs and developmental milestones, that was approved by Baylor College of Medicine Institutional Review Board. Data was collected over a 12-month period. Program directors who had not responded within 3 weeks of the initial mailout were sent a follow-up package containing the same materials. This process was repeated 3 weeks later to the programs that had not yet returned packages. Follow-up phone calls were made and emails sent to the programs that had not responded to the third cycle of the survey.

Survey data was entered into a Microsoft Excel spreadsheet. Definitions, response rate, cooperation rate, refusal rate, and contact rate were calculated based on parameters established by the American Association for Public Opinion Research (AAPOR, 2015).

Results

In 2014 when the project began, there were 29 PA residency/fellowship programs listed on APPAP website with a surgical focus. Thirteen surveys were returned after the initial mailout. After the first follow-up, two more were returned, and a second follow-up survey mailing yielded one returned survey. After a phone call and email follow-up, two additional surveys were returned. Program directors that received the survey and declined were coded as “eligible, non-interview.” Programs where surveys were never returned and directors were never able to be contacted were coded as “unknown eligibility, non-interview.” No programs were listed as “eligible, non-interview.” Eleven programs were coded as “unknown eligibility, non-interview.” Surveys that had at least 80% of questions answered were recorded as complete. Sixty-two percent of program directors (n=18) returned completed surveys. Data analysis consisted of summary statistics for each parameter reported.

Program Size and Length

Fifteen of the responding directors (51%) indicated that their postgraduate surgical PA program was a 12-month program, while one director stated that theirs was a 13-month program. The average number of PAs in each of the programs was 3.7 per cycle. Programs varied in size from one to eight PAs per cycle.

Accreditation

Five (27%) of the eighteen responding programs were accredited by the Accreditation Review Commission on Education for the Physician Assistant (ARC-PA), and four programs were actively seeking accreditation. The remainder of the programs were not accredited and were not seeking accreditation. These nine programs noted that the reasons for not seeking accreditation included a prior negative experience with the ARC-PA process, lack of funding, prior application to accreditation board, and that the current process from ARC-PA was on hold.

Prerequisites for Matriculation

All of the PA programs required that PA applicants to be a graduate of a program accredited by the Physician Assistant Program and National Commission on Certification on Physician Assistants (NCCPA) certification. Ninety-four percent (n=17) of the programs required licensure in the state in which the PA postgraduate program was located.

Salary

From the programs surveyed, annual salaries ranged from \$20,000 to \$80,000. Eleven programs fell into the range of \$40,000 to \$60,000 per year. Six programs reported the salary between \$60,000 and \$80,000 per year, with one program reporting their compensation in the range of \$20,000 to \$40,000 per year. Our survey showed a range of funding sources for PA postgraduate education programs. The majority of programs (n=14) received funding from their associated hospitals. Three programs reported private funding. Two programs were funded by the surgical department of the institution. Funding was also supplemented by patient billing, unfilled positions, and from a school of health professionals.

Curriculum

Eighty-nine percent (n=16) of respondents described a specific, organized curriculum for the PA residents/fellows, while one program was unsure. Ninety-four percent (n=17) of the programs provided written materials (manual, objectives, or course syllabus) to the PA residents/fellows. Seventeen of the programs (94%) indicated learning objectives associated with each rotation, while one program (6%) did not associate learning objectives with rotations.

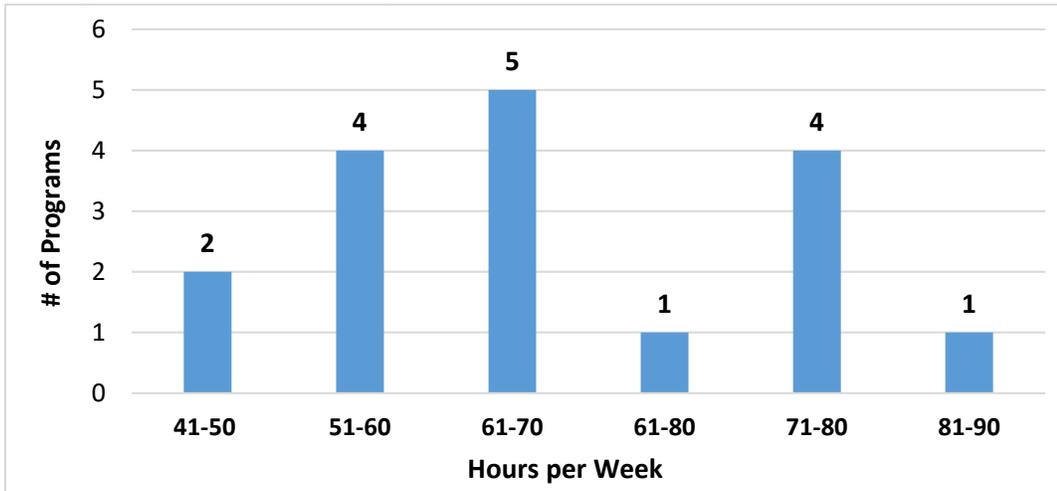
Primary Educators of PAs in the Program

Ninety-four percent (n=17) of the responding programs reported medical faculty involvement in providing didactic education to the PA residents/fellows. Respondents stated that the primary educators of the PAs were Advanced Practice Providers (APPs) (n=10, 56%), physicians only (n=2, 11%), and both APP and physician educators (n=6, 33%).

Required Work Hours

Program directors indicated that program requirements stipulated the number of hours per week the PA worked. One respondent did not answer this question, but the others provided a range of responses. Figure 1 illustrates the number of required work hours for PA postgraduate trainees among the surgical programs surveyed.

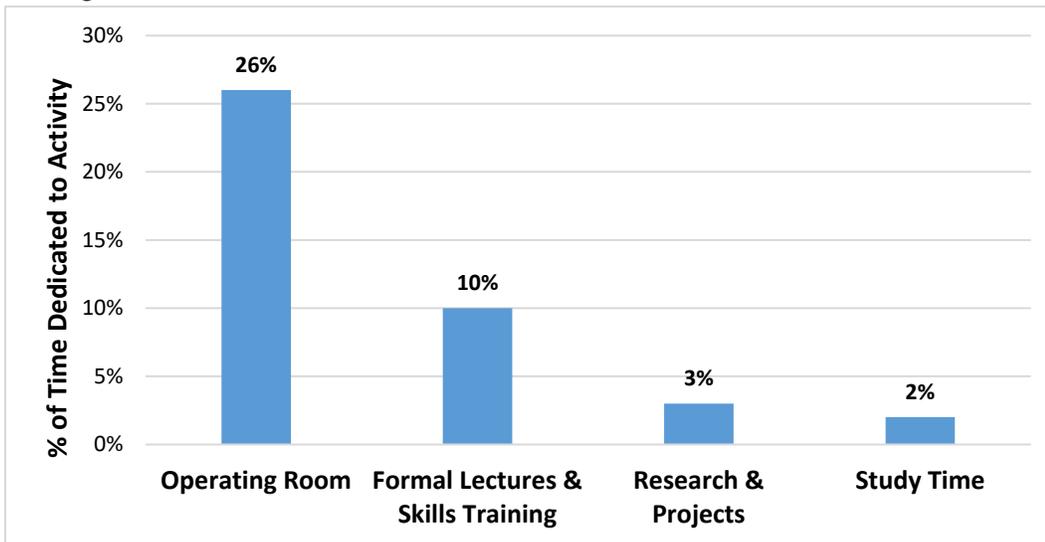
Figure 1
PA Surgical Resident/Fellow Required Hours



PA Fellow/Resident Usage of Time

Figure 2 shows the average usage of time for PA residents/fellows in the 18 responding programs.

Figure 2
PA Surgical Resident/Fellow Dedicated Time



Note. One outlying program allocates almost 25% of the PA trainee’s time to studying.

Evaluation Methods

Respondents described their program evaluation methods of the PA fellow/resident performance from the following descriptors: formal written evaluations, formal verbal evaluations, informal verbal evaluations, and no specific method. Table 1 shows the findings.

Table 1
Program Evaluation Methods of PA Fellow/Resident Performance

n	%	Evaluation Method
3	17%	<ul style="list-style-type: none"> • Formal written evaluations
3	17%	<ul style="list-style-type: none"> • Formal written evaluations • Formal verbal evaluations
3	17%	<ul style="list-style-type: none"> • Formal written evaluations • Informal verbal evaluations
8	44%	<ul style="list-style-type: none"> • Formal written evaluations • Formal verbal evaluations • Informal verbal evaluations
1	5%	<ul style="list-style-type: none"> • Informal verbal evaluations

Respondents could write in specific details describing their evaluation methods. Program directors reported measures used in their programs to assess the progress of the PA, including skills check offs (n=13, 72%), formal testing (n=9, 50%), completion of a rotation (n=15, 83%), and completion of a research project (n=8, 44%). Other evaluation methods noted by the program directors were meeting a set of objectives, an oral exam with case studies at two points in the program, and an oral presentation at the beginning and end of the program. While eight programs required a scholarly research project, seven programs did not require research involvement, and two programs only recommend PA student participation in research.

Requirements to Graduate

Requirements to graduate varied among the PA postgraduate surgical education programs. Twelve programs (67%) had a minimum requirement to achieve graduation, and six programs (33%) had no requirements for graduation. One program described successful completion of all rotations and good evaluations at the end of each rotation as the requirement for graduation. Another reported that completion of all aspects of the student portfolio was sufficient for graduation.

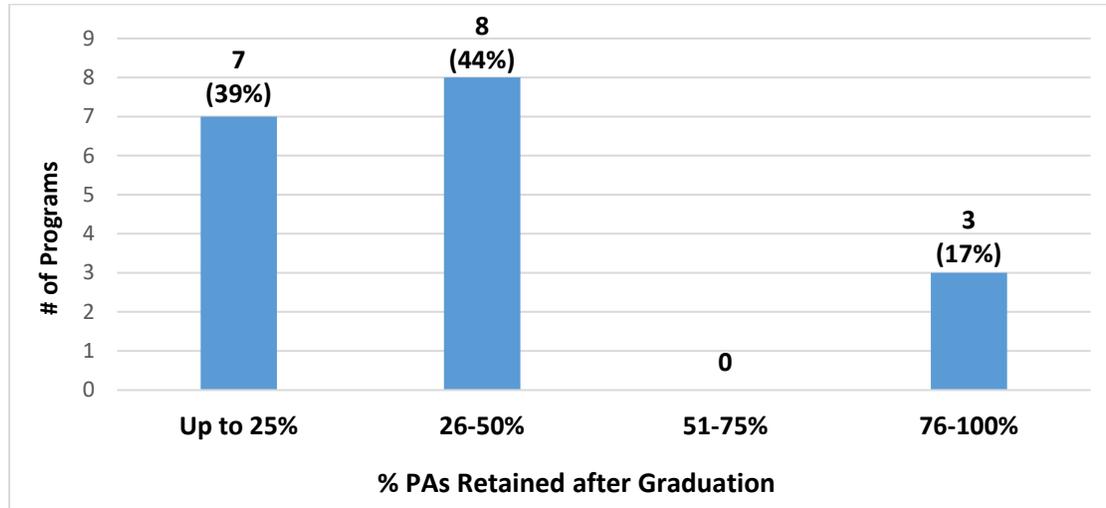
Thirteen programs distributed a certificate of completion at the end of the residency, four programs awarded a general certificate, and one program provided a certificate of postgraduate residency.

Graduate Retention

Program directors noted the percentage of graduates they retained from their postgraduate education program. Figure 3 shows these results. Fifty percent (50%) of the program directors (n=9) were aware of an initiative by the organization to retain PA graduates that they have trained.

Figure 3

PAs Retained by Organization after Graduation from Organization's PA Surgical Postgraduate Program



Perceived Attitude of Medical Community toward PAs with Postgraduate Training

Ninety-four percent (94%; n=17) of the program directors believed the attitude of the medical community is higher towards PAs who complete a postgraduate education program. None of the respondents perceived that the attitude toward PAs with postgraduate education is lower than that of PAs with the standard training. Comments regarding PAs who have completed a postgraduate program included,

“They are much more experienced,” “They are ready to jump into any practice and practice at a high level of care,” and, “they have a broader scope after fellowship training.”

Challenges to PA Postgraduate Training

Program directors described challenges faced within their postgraduate residency programs. Challenges included funding and cost of the program (n=12, 67%), maintaining a high quality of applicants (n=6, 33%), and having good recruitment into the programs (n=6, 33%). Program directors commented that the lower salary associated with the postgraduate program may deter applicants from completing a fellowship to receive a higher salary as a practicing PA.

Thirty-nine percent (n=7, 39%) noted that maintaining faculty engagement and administrative support is a challenge. This included the time it takes to maintain engagement of the faculty and the importance of physician and administrative understanding of the postgraduate PA programs.

Discussion

PA fellowship education is highly esteemed by physician counterparts, particularly in the areas of surgery and subspecialty practice. However, survey respondents did not provide any clear standards for PA postgraduate education that should be incorporated into other PA fellowship programs. Our goal for obtaining this information was to help determine what standards are being upheld across postgraduate PA education programs with a surgical focus.

Program Accreditation

Asprey and Helms (1999) described all PA postgraduate education from the director's perspective and identified the need for better record keeping to standardize the postgraduate education process. Accreditation would necessitate basic requirements to meet certain standards regarding curriculum, funding, evaluation, and completion of postgraduate programs. Despite the accreditation process by ARC-PA currently being on hold, many programs noted the importance of accreditation. Accreditation may be an important factor in maintaining

postgraduate education, upholding standards, and distinguishing postgraduate programs. The validation of accreditation for a postgraduate program may also be an important factor in obtaining qualified applicants.

Program Challenges

Program directors identified some of the challenges associated with their programs and where they felt growth was needed. Common themes emerged from responses. Respondents described simulation education as an area where the residency program needed to expand and improve. Across all surgical specialties, simulation training has become increasingly important (Gardner, Scott, Hebert, et al., 2015; Gardner, Scott, Pedowitz, et al., 2015). Program directors noted the overall cost for funding simulation programs and the time required for appropriate development as challenges to implementing simulation education. In addition, program directors reported their program's desire to increase the capacity of the program to allow more participants per cycle and to add additional subspecialty areas of focus. Respondents also noted the challenge of maintaining hospital support for the integration of PA training programs into the hospital's system of care.

Limitations

The aim of the initiative was to capture the perception of program directors in the setting of postgraduate surgical PA education. This was achieved through a descriptive study utilizing a survey analysis modeled after a research paper published by Asprey and Helms (1999). This project was a snapshot of the postgraduate PA education programs that responded to the survey over a one-year period of time. One of the challenges we faced is that the program directors may have given us subjective responses in their feedback. Additionally, program directors may have been subject to recall bias as well as projecting their perception of what they think is happening in training contrary to what is actually occurring.

The accuracy of the data collected is limited due to the number of respondents (62%). Eight of the programs we initially contacted were not listed on APPAP's website. One program changed the specialty of the fellowship due to lack of interest from PAs, two programs lost funding, one program ceased due to lack of qualified applicants, one program stopped for unknown reasons, and one program was listed as a PA fellowship/residency but responded that they never had a program. Two programs did not respond. Validity and reliability of our survey was not established prior to administration.

Recommendations

As more postgraduate PA programs emerge, further studies are warranted to better evaluate the content and curriculum of postgraduate education for PAs. The PA profession needs to have standards of practice to ensure quality training programs versus "on the job training." It is clear that there is a need to standardize postgraduate PA programs and share education, challenges, and evaluation methods with other programs to continue to improve the future of postgraduate PA programs across the nation.

Summary

As PA postgraduate programs increase in popularity, it is important to evaluate the quality of the programs nationally. This survey of directors of postgraduate education for PAs with a surgical focus identified both similarities and differences in characteristics of postgraduate PA programs. Survey analysis identified a varied approach of residency programs regarding evaluation methods to determine progress and varied requirements of PAs to graduate from the fellowship program. All programs faced challenges, including program funding and recruitment of qualified applicants to the programs. Further study of residency and fellowship programs will help drive a consistent approach to postgraduate training development and evolution. As healthcare evolves, there is a need to develop highly specialized physician assistants and place a premium on retaining them within the healthcare systems. Obtaining information on standard practices across postgraduate PA programs helps determine the value of continuing post graduate residency programs and which program requirements should be upheld nationally.

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