Twenty-Fifth Annual Report on Physician Assistant
Educational Programs
in the United States

2008-2009



Twenty-Fifth Annual Report on Physician Assistant Educational Programs in the United States

2008 - 2009



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INTRODUCTION

Physician Assistant Education Association (PAEA)

Founded in 1972, the Physician Assistant Education Association, formerly known as the Association of Physician Assistant Programs (APAP), is the only national organization representing physician assistant (PA) educational programs in the United States. In April 2010, PAEA represented 149 member PA programs; historically, all accredited programs have elected to join the Association. The Association provides a number of benefits to faculty at member programs, including the Annual Education Forum, a quarterly peer-reviewed journal, a monthly newsletter, faculty and program directories, the PACKRAT student assessment exam, and this annual data report. The Association also provides services to students and applicants, including the online Physician Assistant Programs Directory and the Central Application Service for Physician Assistants (CASPA).

The Annual Report

The process of establishing a national database on PA programs was initiated in 1984 by Denis Oliver, PhD, then director of the University of Iowa PA Program and past president of the Association. The first national survey requested information on a variety of program characteristics, including institutional sponsorship, financial support, program personnel (faculty and support staff), characteristics of applicants and matriculants, curriculum, student attrition, and graduate employment characteristics. The findings from the 1984 survey were published as the *First Annual Report on Physician Assistant Educational Programs in the United States*, 1984–85, and to date, a total of 25 annual reports have been published, including the present report.

Dr. Oliver retired as author after publication of the 11th report. Between 1995 and 2007, the survey was conducted and the report authored by Albert Simon and Marie Link from the Saint Francis University Department of Physician Assistant Sciences. In 2008, PAEA brought the project in house and revamped the process, including revising the annual survey, developing an online survey portal to facilitate programs' submission of data, and redesigning the printed report.

Data from the Annual Report have been published in numerous other venues over the years, including Academic Medicine, the Journal of Physician Assistant Education, the Journal of Medical Education, AAPA News, and the Journal of the American Academy of Physician Assistants. Selected data have been published in the annual reports to the President and Congress on the Status of Health Personnel in the United States and in a publication of the Association of Academic Health Centers.

The data presented in the reports over the years represent responses from greater than 80% of the PA programs surveyed. This response rate makes the findings likely to be representative of the PA educational programs in the United States. PAEA continues to pursue efforts to improve program compliance with its membership requirement to complete the Annual Report survey, in an effort to achieve a 100% response rate. The basic elements of the survey have remained consistent over its 25-year history, which has allowed the Association to detect trends and document changes over time.

The Online Survey Portal

In 2007, PAEA contracted with Liaison International to construct an online survey portal for data collection. The portal was completed in August 2008. All member PA program directors were assigned administrator rights, which allowed them to manage completion of the survey. The portal also enables respondents to download their own program-specific data as well as reports based on aggregate data from all respondents.

The new Programs Survey, on which this report was based, was the first in a series of new and revised survey instruments planned by PAEA. Other surveys that have been launched or are under development will include a faculty survey, matriculant survey, and graduating student survey.

METHODS

The Survey Instrument

The survey consisted of seven sections:

- 1. **General Information:** Includes type of institution, administrative housing, sponsoring institution, year first class admitted, length of program, program start and end months, credentials awarded, and credential changes.
- **2. Financial Information:** Includes program budget sources, expense areas, tuition and fees, incidental costs for students, required equipment, and financial aid information.
- **3.** Additional Program Information: Includes multiple didactic sites, part-time or distant learning options, international rotations, support to clinical sites, educational technologies used, and services provided to students.
- **4. Program Personnel:** Includes fringe benefits, unionization, barriers to hiring faculty members, and curriculum taught by core faculty.
 - Employee Profiles: Includes demographic and academic profiles of faculty and staff members and employee turnover information.
- 5. Application and Admissions: Includes application deadlines, recruiting strategies, entry degrees required, prerequisites, interviews, and health care experience requirements.
- **6.** Matriculants: Includes demographic and academic information about students enrolled.
- 7. **Graduating Students:** Includes information on student graduation, attrition and deceleration, characteristics of recent graduates, and starting salaries for recent graduates.

Survey Period and Coverage

All sections of the survey, except those relating to financial information, covered the 2008-2009 academic year. The financial information was based on the 2008-2009 fiscal year, as defined by each program.

Eight new programs were accredited in 2009 but not in time to be covered in this survey. Two programs that lost their accreditation after the survey period were included in the survey.

Unless otherwise indicated, the survey covers the professional phase of the program. "Professional phase" was defined as that portion of a PA student's education that is conducted in an educational program accredited by the ARC-PA; this is typically about two years in length (one year of classroom and laboratory instruction followed by one year of clinical rotations). Students in "pre-PA programs" or the first two years of 2+2 or similar programs were not considered to be in the professional phase.

Response Rate

The online survey was sent to 142 PAEA member programs in June 2009. The survey data used in this report were downloaded on January 20, 2010. A total of 132 programs responded to the survey, a response rate of 93%. Additional efforts were made by PAEA staff in early March 2010 to collect total matriculation and graduation numbers from nonrespondents, which resulted in a 100% response rate for those two fields.

Data Editing and Analysis

Responses to multiple-choice questions were checked for logical consistency. Responses to open-ended questions were examined for extreme values and possible errors. In cases of obvious misinterpretations or inconsistencies in the responses to specific items, respondents were contacted for clarification.

In general, analyses of the data consisted of producing descriptive statistics on the variables of interest, i.e., percentage, arithmetic mean, standard deviation, median, range of values, and percentiles. T-tests were used to determine levels of statistical significance in differences between groups. Data were not reported when three or fewer persons were represented in a category.

Tables and figures presented in this report represent aggregate data from the respondents. The number of respondents to particular questionnaire items varied slightly.

Improvements

In all past surveys, respondents were asked to self-report the type of their sponsoring institution, which sometimes resulted in ambiguity. In this survey, the Carnegie classification for each institution was matched to the institution by the researcher.

Demographic information for matriculants was merged with the more complete data from PAEA's Central Application Service for Physician Assistants (CASPA) for programs that participated in CASPA.

In an effort to collect complete graduation and matriculant data, nonresponding program were contacted by phone and email to obtain the exact numbers of first-year students and graduated students.

DEFINITIONS

Academic health center: As defined by the Association of Academic Health Centers, an academic health center "consists of an allopathic or osteopathic medical school, one or more other health profession schools or programs (such as allied health, dentistry, graduate studies, nursing, pharmacy, public health, veterinary medicine), and one or more owned or affiliated teaching hospitals, health systems, or other organized health care services."

Consortia: The 50 states and the District of Columbia are divided into six consortia, as follows:

East: DC, DE, MD, PA

Heartland: KS, LA, NE, OK, TX

Midwest: IA, IL, IN, MI, MN, MO, ND, OH, SD, WI

Northeast: CT, MA, ME, NH, NJ, NY, RI, VT

Southeast: AL, AR, FL, GA, KY, MS, NC, SC, TN, VA, WV

West: AK, AZ, CA, CO, HI, ID, MT, NM, NV, OR, UT, WA, WY

Community service: Non-health-related experience as a volunteer in the community.

Core faculty: The program director, the medical director, and all additional faculty, regardless of FTE, who are supervised by the program director.

Decelerated students: Students who will not graduate with their entering class.

Graduating students: Students in the most recently graduated class.

Health care experience: Includes health care related experience and direct patient contact experience.

Health care related experience: Health care experience in which the student's primary responsibilities did not call for direct contact with patients but involved him or her indirectly in patient care (e.g., lab technician, front office worker, hospital personnel, research associate).

Direct patient contact experience: Health care experience in which the student's primary responsibilities called for direct patient contact (e.g., nurse, EMT, corpsman/medic, nurse's aide, medical assistant).

Maximum capacity: Maximum number of students that could potentially be enrolled in a program for each admission cycle.

Professional phase: Refers to only that portion of a PA student's education that is conducted in an educational program accredited by the ARC-PA; this is typically about two years in length (one year of classroom and laboratory instruction, followed by one year of clinical rotations). Students in "pre-PA programs" or the first two years of 2+2 or similar programs are not considered to be in the professional phase.

Additional Copies of this Report

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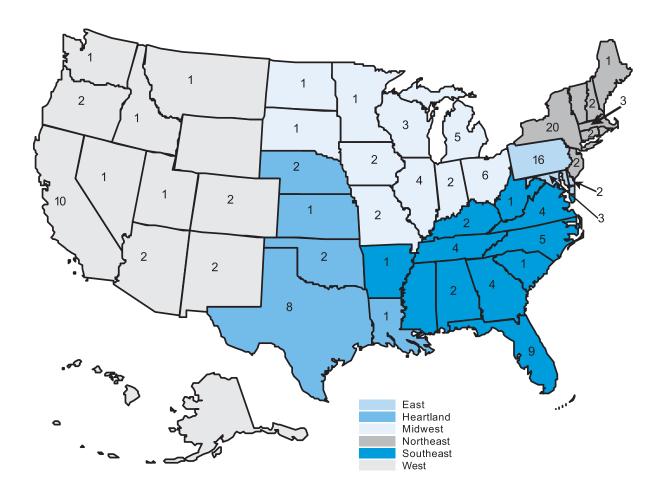
SECTION 1. GENERAL INFORMATION

There were 142 accredited PA programs at the time of this survey in June 2009, of which 132 completed or partially completed the survey. After the survey was conducted, eight new programs joined PAEA and two existing programs lost their accreditation. General information for all 148 programs was included whenever possible.

Geographic Locations

By the end of 2009, there were 148 accredited PA programs around the country (142 at the time of the survey). As shown in Figure 1, New York (20 programs), Pennsylvania (16 programs), and California (10 programs) were the states with the largest numbers of programs. Programs in those three states made up almost one-third of all programs nationwide (31.1%).

Figure 1. Geographic Distribution of PA Programs at the End of 2009



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A comparison of consortium distribution between the 142 PA programs for the survey period 2008-2009 academic year and programs that responded to the survey is presented in Table 1. According to these percentages, responding programs are very similar to the universe of PA programs in terms of their consortium affiliation.

Table 1. Distribution of PA Programs

	All Surveye	All Surveyed Programs		All Respondents		
Consortium	Number	Percent	Number	Percent		
Southeast	29	20.4%	29	22.0%		
Northeast	28	19.7%	23	17.4%		
Midwest	27	19.7%	27	20.5%		
West	23	16.2%	21	15.9%		
East	20	14.1%	18	13.6%		
Heartland	15	10.6%	14	10.6%		
Total	142	100.0%	132	100.0%		

Carnegie Classification of Sponsoring Institutions

About two out of three sponsoring institutions were private (see Table 2). The majority of all surveyed institutions (62%) were universities, including research and master's and doctoral level, while about 5% were associate level colleges (classified in past reports as community colleges).

Table 2. Carnegie Classification of PA Program Sponsoring Institutions

	All Surveyed Programs		All Respondents	
	Number	Percent	Number	Percent
Private	89	62.7%	81	61.4%
Public	53	37.3%	51	38.6%
Associate Level Programs	8	5.6%	8	6.1%
Assoc/PrivFP: Associate's—Private For-profit	1	0.7%	1	0.8%
Assoc/PrivFP4: Associate's—Private For-profit 4-year Primarily Associate's	1	0.7%	1	0.8%
Assoc/Pub4: Associate's—Public 4-year Primarily Associate's	1	0.7%	1	0.8%
Assoc/Pub-S-MC: Associate's—Public Suburban-serving Multicampus	1	0.7%	1	0.8%
Assoc/Pub-S-SC: Associate's—Public Suburban-serving Single Campus	1	0.7%	1	0.8%
Assoc/Pub-U-MC: Associate's—Public Urban-serving Multicampus	3	2.1%	3	2.3%
Baccalaureate Level Programs	11	7.7%	11	8.3%
Bac/A&S: Baccalaureate Colleges—Arts & Sciences	2	1.4%	2	1.5%
Bac/Assoc: Baccalaureate/Associate's Colleges	2	1.4%	2	1.5%
Bac/Diverse: Baccalaureate Colleges—Diverse Fields	7	4.9%	7	5.3%
Medical Schools/Other Health Profession Schools	34	23.9%	29	22.0%
Spec/Med: Special Focus Institutions—Medical schools and medical centers	26	18.3%	24	18.2%
Spec/Health: Special Focus Institutions—Other health professions schools	8	5.6%	5	3.8%
Master's Level Programs	44	31.0%	39	29.5%
Master's L: Master's Colleges and Universities (larger programs)	32	22.5%	28	21.2%
Master's M: Master's Colleges and Universities (medium programs)	6	4.2%	6	4.5%
Master's S: Master's Colleges and Universities (smaller programs)	6	4.2%	5	3.8%
Research Universities	44	31.0%	44	33.3%
DRU: Doctoral/Research Universities	15	10.6%	15	11.4%
RU/H: Research Universities (high research activity)	12	8.5%	12	9.1%
RU/VH: Research Universities (very high research activity)	17	12.0%	17	12.9%
Military (not included in Carnegie Classification)	1	0.7%	1	0.8%
Total	142	100.0%	132	100.0%

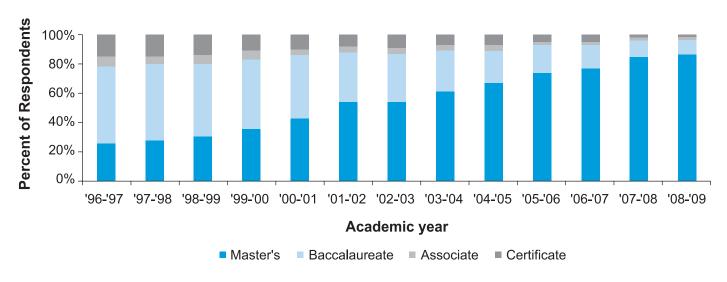
Credentials Awarded

As shown in Table 3, most PA programs (86.6%) offer a master's degree as the highest credential. Only five programs offer a certificate or an associate degree, two of which offer a master's option with another institution. The trend of credentials awarded over time is shown in Figure 2.

Table 3. Highest Credential Awarded by PA Programs

Degree	All Surveye	ed Programs	All Resp	All Respondents	
	Number	Percent	Number	Percent	
Master's	123	86.6%	116	87.9%	
Baccalaureate	14	9.9%	11	8.3%	
Certificate	3	2.1%	3	2.3%	
Associate	2	1.4%	2	1.5%	
Total	142	100.0%	132	100.0%	

Figure 2. Highest Credential Awarded by PA Programs, 1997-2009



Almost one-third (32.6%) of programs awarded two or more different credentials and a few (7.6%) awarded three. A variety of different degrees and credentials were awarded by PA programs.

In academic year 2008-2009, six of the 132 responding programs added to their credentials awarded. The additions were mostly in baccalaureate, master's, and dual-degree programs. Another five programs had degree changes. Three programs moved to a master's degree, and two other programs changed to dual degrees. An overview of credentials awarded by PA programs is presented in Table 4. Note that some programs awarded multiple credentials.

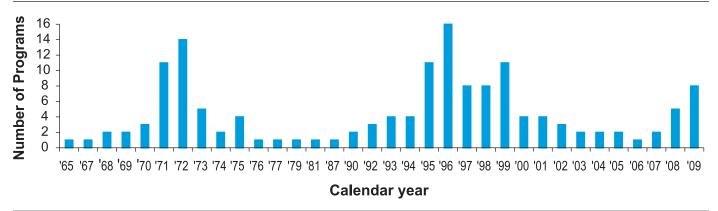
Table 4. Credentials Awarded by PA Programs

Credential	Number of Programs
Certificate	32
Associate	5
Baccalaureate	25
Bachelor of Science (BS)	13
 Bachelor of Science in Physician Assistant (BSPA)/Bachelor of Science in 	
Physician Assistant Studies (BSPAS)/Bachelor of Physician Assistant Studies	
(BPAS)/Bachelor of Physician Assistant (BPA)	8
Bachelor of Medical Sciences (BMS)	1
Bachelor of Clinical Health Services (BCHS)	1
Bachelor of Health Science (BHS)/Bachelor of Science in Health	
Science (BSHS)	2
Master's	116
• Master of Science (MS)	24
 Master of Physician Assistant Studies (MPAS)/Master of Science in Physician 	
Assistant Studies (MSPAS)/Master of Physician Assistant Practice (MPAP)/	
Master of Physician Assistant (MPA)	63
Master of Health Science (MHS)/Master of Science in Health Science (MSHS)	9
 Master of Medical Science (MMS/MMSc)/Master of Science in Medicine (MSM) 	14
Master of Public Health (MPH)	4
Other Master's degree	9
Other degrees	5
N	132

Year First Class Enrolled

Figure 3 shows the number of new programs enrolling their first classes in each year since the first PA program enrolled students in 1965. Eight new programs started their first classes in 2009.

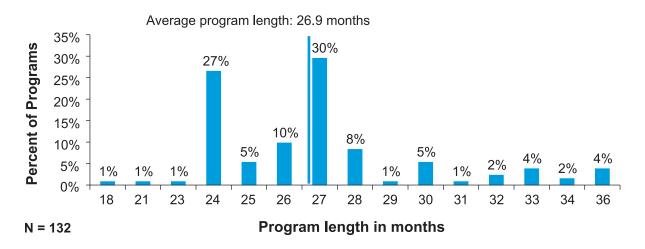
Figure 3. PA Programs by Year First Class Was Enrolled



Program Length

Program length was measured for the whole length for most programs, but only the professional phase for those that had a preprofessional curriculum. Average program length was 26.9 months for all responding programs. Over half of the programs reported a program length of either 24 or 27 months in the 2008-2009 academic year. The shortest program was 18 months and the longest was 36 months (see Figure 4).

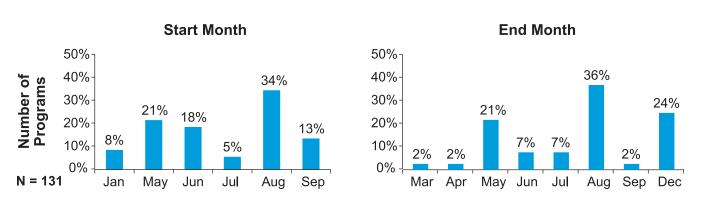
Figure 4. PA Program Length



Program Start and End Months

As seen in Figure 5, the most common start month for responding programs was August (34%), and more than 90% of programs started between May and September. The most common program ending months were May, August, and December.

Figure 5. PA Program Start and End Months



SECTION 2. FINANCIAL INFORMATION

Unlike other sections that asked for information for academic year 2008-2009, programs were asked to supply their financial information for the most recent fiscal year.

Budget

Table 5 summarizes financial support information from different sources. Only responses that included the actual amount of support were used in calculating budget statistics. Zero values and missing values under a category were not included in the calculation for that category. For this reason, mean percentages of budget items from all sources do not add up to 100%.

Budget information was provided by 111 programs. Most responding programs (91.0%, or 101 programs) reported having received direct support from their sponsoring institutions. On average, direct support from the sponsoring institution made up 88.7% of the budget for those 101 PA programs. Only one program received an industry donation, which is not included in Table 5.

Twenty-six percent of the responding programs collected tuition and fees directly, which accounted for 64.4% of their total budget amount.

Budget Source	Mean (\$)	P10 (\$)	P25 (\$)	P50 (\$)	P75 (\$)	P90 (\$)	Mean % of Budget	N
Sponsoring institution	954,696	510,236	685,000	800,000	1,124,218	1,600,248	88.7%	101
Tuition & fees	1,306,264	22,285	67,594	960,000	2,190,000	3,478,332	64.4%	29
Federal grant/contract	108,587	10,000	55,000	101,354	153,000	196,540	31.7%	21
State grant/contract	250,508	40,000	93,000	166,000	370,370	575,706	46.0%	15
AHEC support	9,225	2,000	2,500	3,552	9,850	40,000	40.2%	8
Private foundation	28,067	5,000	10,000	15,000	54,000	75,000	57.9%	7
Private donation	51,117	500	1,500	10,000	27,000	141,500	35.3%	19
Other	19,320	1,000	4,600	15,425	30,576	45,000	30.6%	5
Overall	1,276,432	641,000	736,202	979,198	1,519,952	2,250,000	_	111

Figure 6 shows the trends in total financial support received by PA programs, and support from the sponsoring institution and from federal grants or contracts. The mean total budget for the 2008-2009 fiscal year went down 2.9% from the previous year (also see Appendix II. Historical Tables: Table A. Financial Support Received by PA Programs, 1985-2009). As a result, the average annual increase in total program budget was 6.9%, down from 7.5% in the previous academic year. Average support from the sponsoring institution went up 5.1%, with an average annual increase of 7.6%. The percentage of programs that reported receiving federal grants or contracts in academic year 2008-2009 was up slightly to 18.9%, from 16.3% in the previous year.

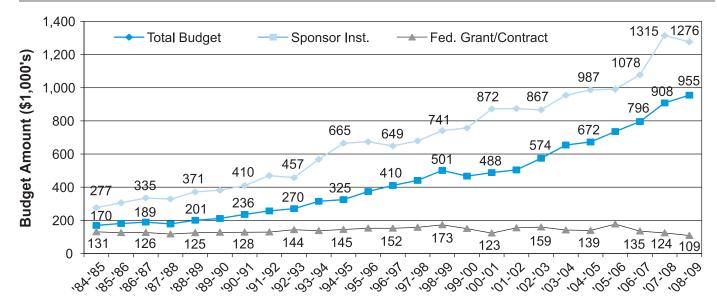


Figure 6. Mean Financial Support Received by PA Programs, 1984-2008

Expenses

The survey asked programs to estimate the percentages of their total budgets accounted for by various items, such as employee salaries, instructional equipment, technology, faculty development, and support for faculty or student travel to clinical sites. The total of the percentages did not necessarily add up to 100% as only major expenses were included and missing values and zeros were not included in calculating means and medians.

Table 6. Percentage Allocation of PA Program Expenses

Expense Items	Mean % of budget	Median % of budget	% Programs Paying for this Category
Faculty salaries (including adjunct faculty)	61.8%	65.0%	99.0%
Staff salaries	11.8%	10.0%	96.2%
Instructional equipment (e.g., mannequins)	4.5%	2.6%	95.2%
Technology (e.g., computer software)	2.6%	2.0%	79.0%
Faculty development (including conferences)	2.6%	2.0%	99.0%
Support for faculty travel to clinical sites	1.9%	1.0%	85.7%
Support for student travel for clinical training	1.6%	1.0%	12.4%
Precepting	4.3%	3.0%	7.6%
Student housing	3.6%	1.0%	13.3%
Recruitment/marketing	1.4%	1.0%	53.3%
Accreditation/professional fees	1.6%	1.0%	93.3%
Administration (e.g., phone, postage, copying)	4.3%	2.0%	87.6%
Other major expenses	10.9%	6.5%	51.4%

N = 105

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The mean, the median, and the percentage of programs that had each type of expense are presented in Table 6. The total number of responding programs was 105. Faculty salaries constituted by far the largest share of the budget (mean of 61.8%), and all but one program reported faculty salaries as an expense. Almost all programs paid for faculty development (96.2%). Eight programs (7.6%) listed precepting as part of their expenses, which, on average, accounted for 4.3% of the total expense. Other major expenses were insurance, rent, student scholarships, taxes, honoraria, and fringe benefits.

Tuition and Fees, Incidental Costs, and Financial Aid

For students enrolled in PA programs in 2008, the mean resident tuition was \$50,567 and the mean nonresident tuition was \$61,088, for the whole professional phase, which averaged 26.9 months in length (see Table 7).

"Incidental costs" refer to the total costs incurred by a student during the entire program, except for tuition, fees, and personal living expenses (e.g., transportation, food, housing expenses). Incidental costs included, for example, textbooks, diagnostic equipment, and required technology/software. The mean total incidental costs per student for the entire professional phase were \$6,020.

Table 7. Tuition, Incidental Costs, and Financial Aid in PA Programs

	Mean	P10	P25	P50	P75	P90	
	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	N
Resident tuition	50,567	20,115	29,454	54,000	64,843	79,200	115
Nonresident tuition	61,088	34,585	50,147	61,080	72,000	86,592	111
Incidental costs	6,020	2,000	3,000	4,000	6,000	10,000	109

On average, 91.9% of students in the most recently enrolled class received financial aid. In 23.5% of the programs, all first-year students received financial aid.

Of the 115 respondents, 193 programs also reported their tuition in the 2008 survey. Less than two thirds (61.4%) of the programs had increased their in-state tuition, while 21.5% had a decrease. Mean resident tuition increased 4.0% from 2007 to 2008, lower than the average annual increase of 9.1% from 1984 to 2008 (also see Appendix II: Table B. PA Student Expenses and Financial Aid, 1985-2009). Nonresident tuition was 6.6% higher in 2007 than the year before, also lower than the 8.5% average annual increase.

¹ The Interservice PA program does not collect tuition or fees and students do not receive financial aid, so the program was not included in this section of the analysis.

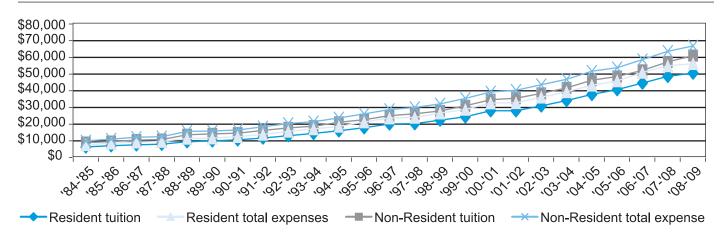


Figure 7. Mean Tuition and Total Expenses for PA Students, 1985-2009

"Total expense" in Figure 7 refers to the sum of tuition and incidental costs for students for the entire period of their training. Between 1984 and 2008, resident tuition went up 7.9 times, from \$6,378 to \$50,611, while nonresident tuition increased 6.8 times, from \$8,968 to \$61,088. Total expenses followed a very similar trend.

Payment for Required Equipment

Programs were asked whether they required their students to have diagnostic equipment, laptop computers, PDAs, or other equipment. As shown in Table 8, the large majority (84.9%) of programs required diagnostic equipment, and more than half of programs required laptop computers (61.6%) and PDAs (53.5%). Most of this required equipment was paid for by students. "Other equipment" listed included standardized patients, exams, lab coats, etc.

Table 8. Equipment Required by PA Programs

		Paid for by						
Required Equipment	% Programs	Student	Program	Sponsoring Institution	Other sponsor			
gnostic equipment	84.9%	97.1%	2.0%	3.0%				
op computer	49.6%	91.5%	5.1%	3.4%				
, smartphone	38.7%	87.1%	10.9%	2.2%	2.2%			
er equipment	25.2%	93.3%	10.0%					
	119							

Note: Required equipment could have more than one payment option

Background Check and Mandatory Drug Testing

Nearly three quarters (72.5%) of programs reported that students were required to have a background check upon matriculation to the program, while 34.7% of programs mandated drug testing during the 2008-2009 academic year.

SECTION 3. ADDITIONAL PROGRAM INFORMATION

Multiple Didactic Sites, Part-Time Options, and Web-Based Courses

Table 9 shows that relatively few programs offer ways for students to receive education outside of full-time classroom attendance at a program's primary location.

Table 9. Satellite Sites, Part-Time Options, and Web-Based Courses at PA Programs

	% Programs	N	
Multiple didactic sites	9.7%	124	
Advertised part-time option	2.4%	124	
Asynchronous, self-paced, web-based courses in an exclusively distance learning format	8.9%	124	

International Rotations

In the 2008-2009 academic year, 39.5% of programs offered international rotations, none of which were required rotations.

Precepting

Among the 124 programs that responded to this question, eight programs (6.5%) paid to precept their students (see Table 10). The percentage is slightly lower than last year (7.9%). Most programs that reported paying for preceptors paid both the preceptors and the clinical sites.

Table 10. PA Programs Paying to Precept Students

	% Programs	N
Paid to precept students	6.5%	124
Paid to:		
Clinical preceptor only	14.3%	7
Clinical sites only	0%	7
Both	85.7%	7

Programs reported a number of different types of support and recognition that they provided to clinical preceptors (see Figure 8). The most common form of recognition was a certificate of appreciation, provided by 73.6% of the responding programs, followed by adjunct/clinical/faculty status (61.6%), and library access (56.0%). CME was provided by 44.0% of the programs. This distribution is roughly unchanged from the year before. "Other" types of preceptor support included gifts, thank-you cards, dinners, and workshops.

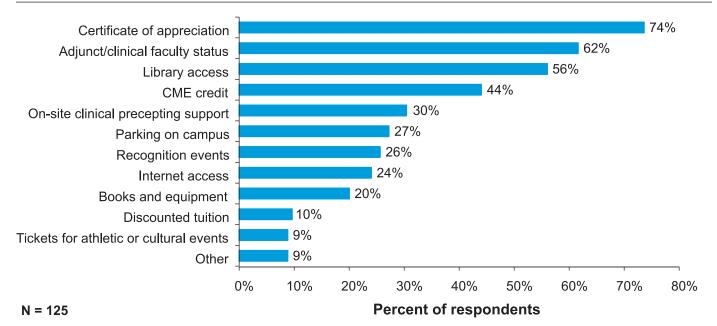
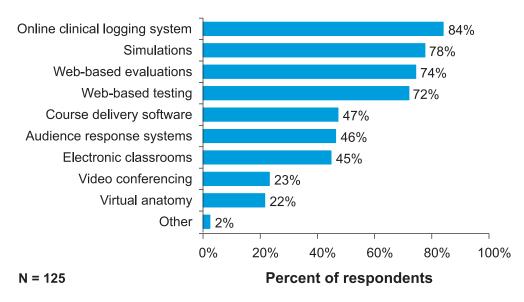


Figure 8. Types of Support Provided by PA Programs to Clinical Preceptors

Educational Technologies

Figure 9 summarizes the types of educational technologies used by PA programs. An online clinical logging system was the most widely used technology, by 84% of the programs. Simulations, web-based evaluations, and web-based testing were all used by more than two-thirds of programs. "Other" technologies include smart lab and cadaver lab and online course materials.





Available Support and Services for Students

Many PA programs or their sponsoring institutions provide counseling, insurance, and other supportive services to students. Figure 10 shows that all types of services that were available to students were provided by more than half of the programs. In more than 90% of responding programs, PA students had access to psychological and academic counseling.



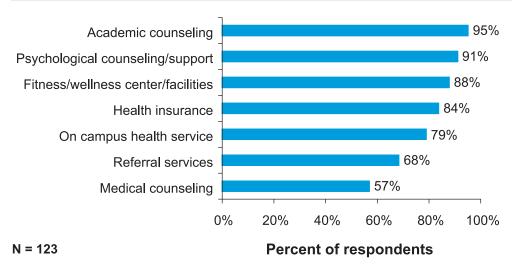


Table 11 shows payment sources for student support services. (As some services were paid for by more than one source, the percentages do not necessarily add up to 100%.) Students in 98% of the responding programs paid for their own health insurance and, in almost 70% of the programs, students paid for medical counseling and health services. In contrast, more than 75% of the sponsoring institutions paid for academic and psychological counseling.

Table 11. Payment Sources for Available Student Support Services at PA Programs

			Paid by	
Types of Support/Services	Student	Program	Sponsoring Institution	Other Sponsor
lealth insurance	98.0%	0.0%	2.9%	1.0%
n-campus health service	68.1%	0.0%	42.6%	1.1%
eferral services	53.1%	6.2%	45.7%	1.2%
edical counseling	67.2%	3.0%	41.8%	1.5%
ademic counseling	9.6%	29.6%	76.5%	0.9%
chological counseling/support	31.5%	4.6%	78.7%	0.9%
ness/wellness center/facilities	39.6%	0.9%	70.8%	0.9%

SECTION 4. PROGRAM PERSONNEL

On average, responding PA programs had 7.8 faculty members and 3.2 staff members. The largest program had 43 employees, faculty and staff, while the smallest had only four. Overall, 120 programs provided complete or partial information on 1,370 program personnel — 1,011 faculty and 359 staff members.

Student/Faculty Ratio

The student/faculty ratio, calculated by the total number of enrollees divided by the total number of faculty, was 14.8 for academic year 2008-2009 (see Table 12).

Table 12. PA Program Student/Faculty Ratio

	Mean	P10	P25	P50 (Median)	P75	P90	N
Student/faculty ratio	14.8	6.9	10.5	13.9	17.0	22.5	117

Demographic Characteristics

The mean age of all faculty members in 2008-2009 was 48.2, with about two-thirds between the ages of 40 and 59 (see Table 13). More than half of faculty members were female (55.9%). In terms of ethnicity, the large majority (83.2%) were white.

The mean age of all staff members was 45.7. An overwhelming 88.6% of the staff members were female, and 74.6% were white.

Table 13. Demographic Characteristics of PA Program Employees

	Faculty	Staff		Faculty	Staff
Age			Ethnicity		
Mean	48.2	45.7	White	83.2%	74.6%
Median	49.0	47.0	Black/African-American	6.0%	10.8%
Below 30	2.1%	10.7%	Hispanic/Latino	4.0%	9.4%
30 to 39	20.2%	22.6%	Asian	3.1%	3.5%
40 to 49	30.3%	23.8%	American Indian or Alaskan Native	1.0%	0.3%
50 to 59	33.8%	31.0%	Pacific Islander	0.6%	0.6%
60 and above	13.6%	11.9%	Other	1.0%	0.3%
N	719	252	No answer	1.3%	0.6%
			N	974	342
Gender					
Female	55.9%	88.6%			
Male	44.1%	11.4%			
Ν	1008	358			

Professional Characteristics

Faculty members have been in their current positions for an average of 6.3 years (with a lower median of 4 years), as shown in Table 14. Almost 80% of the faculty members were PAs. The percentage of tenured faculty was 9.8%, while another 17% were on a tenure track. Nearly half of faculty members (45.8%) were assistant professors, 22.4% were lecturers/instructors, 17.3% were associate professors, and 6.8% were full professors. More than 60% of faculty members in the responding programs had a master's degree as their highest degree, while 30.5% had a doctoral degree (including MDs and DOs).

A small percentage of staff employees, 6.4%, were PAs. Nearly one quarter (21.3%) of staff members had a master's degree or higher.

Table 14. Professional Characteristics of PA Program Employees

	Faculty	Staff		Faculty	Staff
Years in Position			Tenure Status		
Mean	6.3	5.9	On tenure track	17.0%	0.0%
Median	4.0	4.0	Tenured	9.8%	0.5%
Less than 1 year	6.2%	5.5%	Neither	73.2%	99.6%
1-3 years	39.0%	43.6%	N	978	224
4-7 years	24.0%	23.8%			
8-14 years	21.8%	17.7%	PA Status		
15-24 years	5.9%	7.0%	Non-PA	22.4%	93.6%
25 years or longer	3.0%	2.3%	PA	77.6	6.4%
N	963	344	N	1007	346
Highest Degree			Rank		
Associate	0.2%	16.0%	Professor	6.8%	
Baccalaureate	7.4%	37.0%	Associate professor	17.3%	2.7%
Certificate	0.2%	1.7%	Assistant professor	45.8%	1.4%
Master's	61.4%	18.3%	Emeritus	0.2%	0.0%
Doctoral degree	30.5%	3.0%	Lecturer/Instructor	22.4%	8.1%
None	0.1%	20.3%	Other	7.4%	87.8%
Other	0.2%	3.7%			
N	998	300	Ν	981	74

Salaries

Table 15 presents descriptive statistics for staff and faculty salaries, as well as the mean and median full-time equivalents (FTEs) for each group. Salaries were reported as 100% of FTE. In cases when less than 100% FTE was reported, respondents were asked to adjust the actual salary by the amount of the FTE to achieve a 100% FTE salary. The average salary for all those categorized as "staff" was \$39,526, while that of the "faculty" was \$84,876, with a median of \$82,000. Male faculty members had a higher mean salary, and a lower mean FTE, than their female counterparts. The mean salary for male faculty members was \$90,629, with a mean FTE of 79.4%, while the mean salary for female faculty members was \$80,726, with a mean FTE of 87.0%. The average faculty salary for the category labeled "White" was higher than "Non-White," and the mean FTE was also slightly higher.

Table 15. PA Program Staff and Faculty Salaries by Gender and Ethnicity

		•	•		•	
				Faculty		
	Staff	All	Male	Female	White	Non-White
Mean	\$39,526	\$84,876	\$90,629	\$80,726	\$85,603	\$80,323
P10	\$24,960	\$57,380	\$58,750	\$57,000	\$57,380	\$48,326
P25	\$29,844	\$71,784	\$73,542	\$70,871	\$71,787	\$70,867
P50 (median)	\$35,700	\$82,000	\$83,922	\$80,000	\$82,000	\$82,000
P75	\$45,000	\$95,000	\$104,000	\$90,000	\$96,000	\$89,000
P90	\$59,740	\$114,000	\$130,000	\$103,608	\$115,000	\$104,818
N	257	685	287	397	576	97
Mean FTE*	94.0%	83.7%	79.4%	87.0 %	84.4%	80.4%
Median FTE*	100%	100%	100%	100%	100%	100%

^{*}Salaries are converted to 1.0 FTE, and are not a function of the FTE numbers in the table.

The average faculty salary increased with age and years in position, as shown in Table 16.

Table 16. PA Program Faculty Salaries by Age and Years in Position

	Mean	P10	P25	P50	P75	P90	Mean FTE	N
Age								
Below 30	\$73,508	\$53,750	\$69,000	\$71,764	\$83,200	\$86,840	74.7%	7
30 to 39	\$75,072	\$50,738	\$70,000	\$78,052	\$86,445	\$96,000	85.3%	111
40 to 49	\$87,324	\$64,000	\$72,000	\$83,475	\$96,000	\$107,919	86.7%	161
50 to 59	\$86,208	\$56,988	\$75,167	\$83,333	\$96,000	\$120,000	85.9%	175
Above 60	\$99,142	\$59,000	\$74,796	\$95,680	\$117,956	\$147,915	83.1%	73
Years in Position								
Less than 1 year	\$77,003	\$52,000	\$70,000	\$76,500	\$85,000	\$98,500	84.7%	42
1-3 years	\$78,673	\$50,869	\$68,996	\$76,612	\$86,827	\$103,696	84.9%	240
4-7 years	\$85,432	\$63,150	\$72,364	\$82,000	\$92,000	\$112,000	80.9%	157
8-14 years	\$91,409	\$64,072	\$77,000	\$87,638	\$100,775	\$114,745	85.5%	168
15-24 years	\$90,391	\$66,666	\$77,184	\$83,756	\$106,000	\$137,000	87.6%	39
25 years or more	\$100,783	\$39,556	\$77,135	\$106,000	\$128,000	\$166,300	82.0%	19

Some faculty members hold multiple administrative roles. Table 17 reports faculty salary by their primary position only.

Table 17. PA Program Faculty Salary by Primary Position

	Mean	P10	P25	P50	P75	P90	Mean FTE	N
Academic coordinator	\$81,080	\$69,288	\$75,000	\$82,000	\$88,000	\$93,000	94.8%	66
Admissions director	\$66,334	\$37,900	\$40,000	\$70,272	\$83,640	\$87,276	83.1%	11
Assistant director	\$85,965	\$65,000	\$82,000	\$84,600	\$94,015	\$105,575	91.0%	6
Associate director	\$94,594	\$78,958	\$85,280	\$95,000	\$101,760	\$111,000	97.9%	29
Clinical coordinator	\$80,332	\$66,950	\$73,100	\$79,459	\$86,964	\$96,000	92.6%	94
Dean/assoc. dean/division chief	\$130,327	\$110,940	\$118,000	\$129,750	\$143,520	\$150,000	85.6%	6
Department chair	\$105,893	\$80,000	\$93,587	\$105,000	\$115,000	\$131,000	96.5%	21
Faculty	\$75,664	\$52,000	\$69,532	\$77,092	\$85,000	\$98,172	83.9%	304
Medical director	\$117,545	\$25,603	\$60,000	\$114,745	\$163,158	\$206,000	37.4%	53
Program director	\$108,711	\$87,000	\$94,341	\$105,946	\$120,000	\$137,369	99.4%	54
Research coordinator	\$89,834	\$68,000	\$76,050	\$82,000	\$92,995	\$150,000	82.5%	9

Table 18 shows that PA faculty members were, on average, paid less than those who were not PAs (\$82,420 for PAs and \$93,869 for non-PAs; these figures include medical directors). Not surprisingly, tenured faculty had a higher average salary (\$101,888) than those on the tenure track (\$83,733), which was in turn higher than those who were neither tenured nor on tenure track (\$82,337).

Table 18. PA Program Faculty Salaries by PA and Tenure Status

			On Tenure					
	PA	Non-PA	Tenured	Track	Neither			
Mean	\$82,420	\$93,869	\$101,888	\$83,733	\$82,337			
P10	\$64,000	\$37,900	\$64,000	\$65,000	\$53,060			
P25	\$72,494	\$65,000	\$80,000	\$72,000	\$70,500			
P50 (median)	\$82,000	\$83,667	\$99,872	\$81,270	\$80,000			
P75	\$92,275	\$115,350	\$112,000	\$92,498	\$92,000			
P90	\$106,000	\$156,000	\$147,915	\$100,000	\$110,940			
N	536	148	69	112	495			
Mean FTE	89.8%	62.4%	87.9%	90.1%	81.5%			

Professors earned \$112,323 on average, while associate professors had an average salary of \$99,725 and assistant professors \$81,732. Lecturers/instructors were paid \$70,031 on average (see Table 19). The table also shows that faculty members with higher degrees were generally paid higher salaries.

Table 19. PA Program Faculty Salaries by Rank and Highest Degree Received

	Rank				Highest Degree Received			
	Professor	Associate Professor	Assistant Professor	Lecturer/ Instructor	Doctoral Degree	Master's	Baccalaureate	
Mean	\$112,323	\$99,725	\$81,732	\$70,031	\$97,301	\$80,596	\$75,216	
P10	\$68,000	\$70,000	\$63,150	\$32,303	\$48,326	\$61,915	\$55,000	
P25	\$93,000	\$81,061	\$71,400	\$64,000	\$73,182	\$71,892	\$69,931	
P50 (median)	\$106,000	\$96,000	\$80,000	\$75,000	\$92,382	\$81,031	\$75,079	
P75	\$128,037	\$116,478	\$91,000	\$83,000	\$118,300	\$90,000	\$83,200	
P90	\$150,000	\$140,688	\$102,000	\$90,200	\$150,000	\$103,000	\$100,000	
N	43	123	331	130	192	440	49	
Mean FTE	75.8%	86.3%	86.7%	82.5%	71.2%	89.5%	82.5%	

Clinical Work

About two-thirds (65.7%) of the program personnel did clinical work in the 2008-2009 academic year, with an average of 14 hours per week. For the majority of faculty who worked clinically (81.1%), they retained the income themselves (see Figure 11).

Income retained by program/institution 12%

Volunteer position (no income) 7%

Income retained by faculty member

Figure 11. Clinical Income Disposition for PA Program Faculty

Turnover

On average, PA programs added more faculty members than they lost in the 2008-2009 academic year. Out of the 1,011 faculty members employed at responding PA programs in the 2008-2009 academic year, 7% ended their employment and 12.7% were hired during the same period. Likewise, 7% of staff members terminated their employment, while 15.4% were hired.

The mean salary of faculty members who left during the 2008-2009 academic year was \$74,045, compared with \$77,280 for incoming faculty members.

The most common stated reason for faculty to leave a program was to return to clinical practice (33.8%), followed by geographic relocation, retirement, and family obligations (see Figure 12).

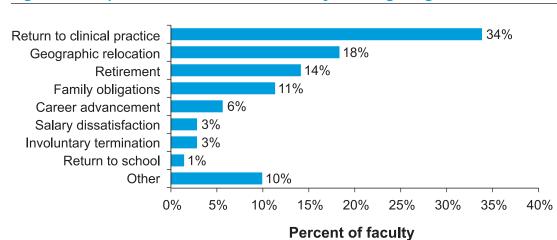


Figure 12. Reported Reasons for PA Faculty Leaving Programs

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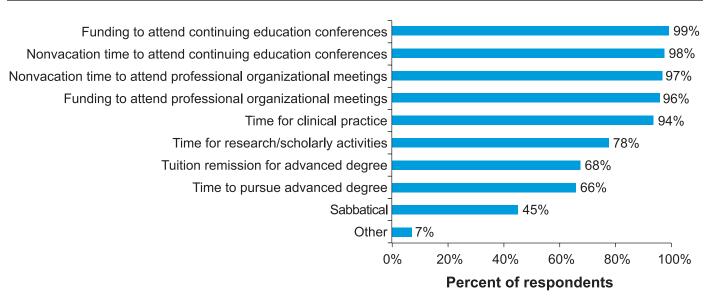
It took programs an average of 14 weeks (range, 0-104 weeks) to find a new faculty member. The programs received an average of five (range, 0-50) qualified applications for a position. Most new faculty members (72.5%) worked in clinical practice before they became PA educators, while about 13% worked in PA education.

SECTION 5. PROFESSIONAL DEVELOPMENT

Professional Development

Almost all responding programs offered their employees funding and nonvacation time to attend continuing education conferences and professional organizational meetings (see Figure 13). Most PA programs (94%) allowed time for clinical practice. This is largely unchanged from the previous survey. "Other" support includes reimbursement for credentialing and licensure expenses, tuition waiver, membership in professional societies, traveling allowances, etc.

Figure 13. PA Faculty Professional Development Benefits



Tenure Track and Unionization

Just as in the previous survey, tenure track was available to faculty in 59.1% of PA programs.

Among the 127 responding programs, 19 (15.0%) reported that their faculty were unionized. Unions listed included the American Association of University Professors (AAUP), American Federation of Teachers (AFT), United Federation of Teachers (UFT), United University Professions (UUP), National Education Association (NEA), Professional Staff Congress, university faculty federation, teachers union, faculty association, and state education association.

Fringe Benefits

Figure 14 shows that all responding PA programs offered life insurance, retirement plans, and health insurance to their employees. Most of them also offered dental insurance (98.4%) and long term disability insurance (93.7%). Among the "other" benefits reported by programs are vision insurance, cancer insurance, and computer purchase programs.

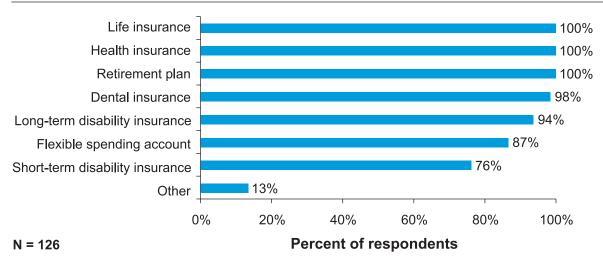


Figure 14. PA Program Faculty Fringe Benefits

Barriers to Hiring New Faculty

Ninety-two programs reported having encountered barriers of some kind to hiring new faculty. Salary was the most common barrier to hiring (67.4%), followed by lack of candidates (64.1%), and candidates' lack of teaching experience (57.6%) (see Figure 15). Among "other" barriers, a hiring freeze was reported by a number of programs, while unsatisfactory fringe benefits and the program's visibility were stated by two programs.

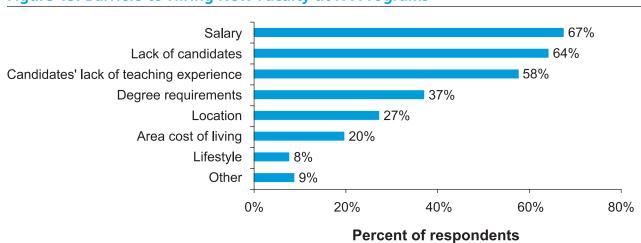


Figure 15. Barriers to Hiring New Faculty at PA Programs

Curriculum Taught or Coordinated by Core Faculty

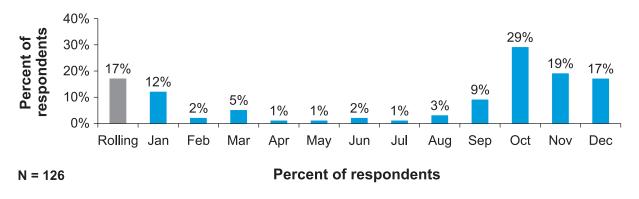
The term "core faculty" was defined in this survey as consisting of the program director, the medical director, and all other faculty, regardless of FTE, who are supervised by the program director. The average percentage of the curriculum taught or coordinated by core faculty in the 2008-2009 academic year was 71.6%, with a higher median of 76%. The range was considerable, from 15% to 100%.

SECTION 6. APPLICATION AND ADMISSIONS

Application Deadline

Figure 16 presents the application deadline months for PA programs. (As some of the programs had more than one deadline, the percentages do not add up to 100%.) The PA program application deadlines span the whole year. Almost 90% of the deadlines were between September and January. Seventeen percent of programs had rolling deadlines.

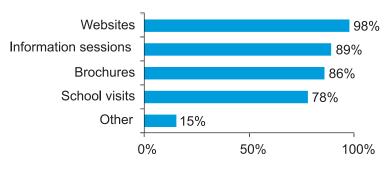
Figure 16. PA Program Application Deadlines



Recruiting Strategies

Most of the responding PA programs used websites (97.4%) in their recruiting processes, followed by information sessions (88.9%), brochures (85.7%), and school visits (77.8%) (see Figure 17). Other strategies used were personal contacts, open houses, various types of career fairs, recruiting sessions/forums, fact sheets, CDs, and "pipeline" strategies in collaboration with other organizations.

Figure 17. Recruiting Strategies Adopted by PA Programs



N = 126

Percent of respondents

Degree Requirements

Table 20 summarizes the degree requirements for each degree and the credential offered by PA programs. Also note that some programs offered more than one degree or credential.

Table 20. PA Program Degree Requirements for Each Credential Awarded

		Credentials Awar	Credentials Awarded		
Requirement	Associate Degree	Baccalaureate Degree	Certificate	Master's Degree	
Degree not required	100.0%	75.0%	61.1%	21.7%	
Certificate	14.3%	7.1%	0.0%	0.9%	
Baccalaureate	0.0%	17.9%	38.9%	83.0%	
N	7	28	11	106	

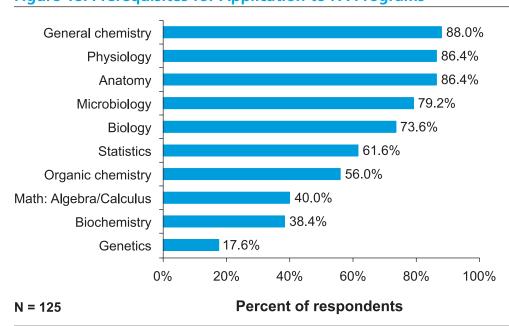
Note: As some of the programs offered more than one credential or required more than one degree, the percentages do not add up to 100%.

No programs that offered an associate degree required a prior degree. Less than 20% of the baccalaureate programs required a prior baccalaureate degree. By comparison, almost 40% of the certificate-offering programs and 83% of the master's degree programs required baccalaureate degrees of applicants.

Prerequisites

PA programs were asked to select from a list of common science courses which ones they require from their applicants. The results are shown in Figure 18. General chemistry was required by 88.0% of the programs, followed by physiology (86.4%), anatomy (86.4%), microbiology (79.2%), and biology (73.6%). Math, biochemistry, and genetics were required by less than half of the programs.

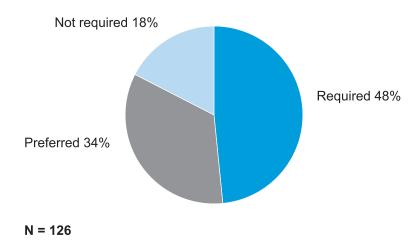
Figure 18. Prerequisites for Application to PA Programs



Health Care Experience Requirements

As shown in Figure 19, less than half (48.2%) of responding programs required their applicants to have prior health care experience, while 13.2% did not require any health care experience. The remaining programs "preferred" but did not require their applicants to have prior health care experience.

Figure 19. PA Program Health Care Experience Requirements for Applicants



Interview Requirement

Interviews were required by most of the programs; only 4.8% of the 126 responding programs did not require an interview from prospective PA students.

SECTION 7. MATRICULANTS

Enrollment and Capacity

As seen in Table 21, the mean total enrollment of the 118 responding programs was 105.7, lower than the mean capacity of 109.3.

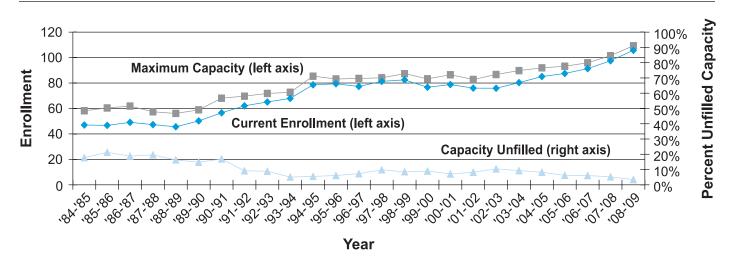
Table 21. PA Program Enrollment and Capacity

	All Years		First-Yea	First-Year Class		ar Class	Third-Year Class		
_	Enrollment	Capacity	Enrollment	Capacity	Enrollment	Capacity	Enrollment	Capacity	
Mean	105.7	109.3	45.6	45.7	42.2	44.4	37.0	40.5	
P10	51	52	24	25	23	25	20	24	
P25	70	72	31	31	30	30	26.5	29	
P50 (median)	95	100	40	40	36	40	35	37.5	
P75	126	132	54	54	48	50	43.5	50	
P90	171	162	71	70	66	68	55	56.5	
Ν	118	118	118	118	116	116	60	60	

For first-year class enrollment, 63.9% of the responding programs filled exactly 100% of their capacity; almost half of the rest of the programs (17.6% overall) enrolled less than their capacity and the other half (18.5% overall) exceeded their capacity. On average, responding programs filled 99.3% of their first-year capacity.

Trends in total capacity and enrollment are shown in Figure 20. The percentage of seats that is unfilled has declined steadily over the years, even while the overall capacity has increased. (Also see Appendix II: Table C. Enrollment and Capacity for All Classes, 1984-2008.)

Figure 20. PA Program Enrollment and Capacity, 1985-2009



Withdrawal and Deceleration

On average, 2.4 students decelerated and 2.4 students withdrew or were dismissed in any phase of the PA program. Table 22 shows percentages of withdrawal and deceleration among students. Percentages are calculated as number of students decelerated or withdrawn divided by the total number of students in all years.

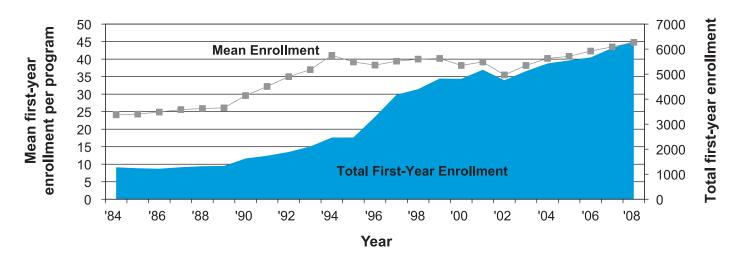
Table 22. Rates of Deceleration and Withdrawal of PA Students

	Decelerated	Withdrawn or Dismissed
Mean	2.3%	2.5%
P10	0.0%	0.0%
P25	0.0%	0.8%
P50 (median)	1.4%	1.8%
P75	3.7%	4.1%
P90	5.7%	5.9%
Ν	114	114

First-Year Class Enrollment

First-year class enrollment was collected for all accredited programs in the 2008-2009 academic year, including the programs that did not respond to the survey. (This applies only to the basic enrollment number; the demographic information that follows is based only on survey responses). As shown in Figure 21, a total of 6,312 students were reported.¹

Figure 21. First-Year Class Enrollment at PA Programs, 1984-2008



¹ Prior to 2009, all graduation numbers were extrapolated from mean graduation numbers calculated from survey responses.

First-Year Class — Gender, Age, Ethnicity, GPA, and Health Care Experience

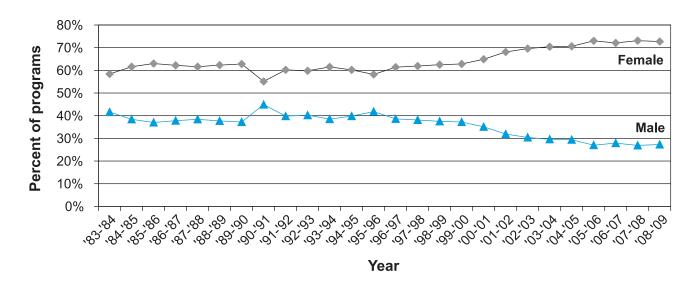
Percentages of male and female enrollees are shown in Table 23. Distribution of male and female first-year enrollees was similar to that of all years. Female students made up more than 70% of the total for all years.

Table 23. PA Program Enrollment by Gender

	Female		M	ale
	All Years	First Year	All Years	First Year
Mean	73.5%	72.7%	26.5%	27.3%
P10	59.3%	54.0%	15.0%	12.9%
P25	70.0%	67.6%	18.9%	18.6%
P50 (median)	76.4%	75.0%	23.6%	25.0%
P75	81.1%	81.4%	30.0%	32.4%
P90	85.0%	87.1%	40.7%	46.0%
Ν	119	119	119	119

The gender distribution of first-year students has started to stabilize around 30% male and 70% female after a 20-plus-year trend of a gradually increasing percentage of females, as seen in Figure 22 (also see Appendix II: Table D. First Year Gender and Ethnicity, 1984-2009).

Figure 22. First-Year Enrollment at PA Programs by Gender, 1983-2008



Information on the race and ethnicity of first-year students was collected both through programs and through self-reported data from the Central Application Service for Physician Assistants (CASPA). As a result, a total of 5,437 first-year students from 126 programs were accounted for in this analysis. The majority of the students (77.5%) were white, followed by Hispanic (non-white) (6.4%), Asian (6.2%), African American (4.7%), American Indian or Alaskan Native (0.8%), and Native Hawaiian or Pacific Islander (0.4%). For 3.9% of the students race or ethnicity was not provided or was unknown.

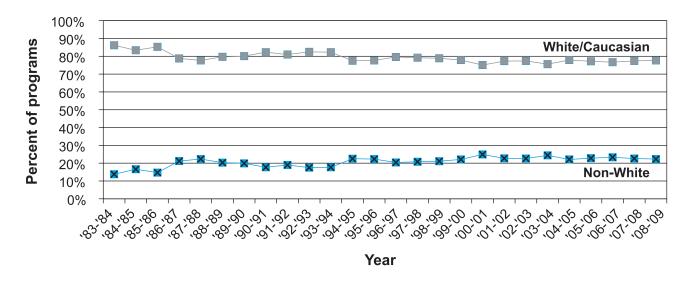
The mean percentage of white enrollees per program in the first year was 77.7%, with a much higher median of 81.5% (see Table 24).

Table 24. First-Year Class Ethnicity by Program

	White		Non	-White
_	Mean	% of Total	Mean	% of Total
Mean	33.5	77.7%	8.8	22.3%
P10	14	50.0%	1	3.0%
P25	22	72.2%	3	8.0%
P50 (median)	29.5	81.5%	6	17.3%
P75	42	89.7%	11	25.0%
P90	54	94.3%	21	41.5%
Ν	126	126	126	126

Figure 23 shows the trend of racial distribution for first-year students. The percentage of non-white matriculants has remained steady at around 23% for the past 10 years or so.

Figure 23. PA Program First-Year Enrollment by Ethnicity (White/Non-White), 1983-2008



The mean age of first-year enrollees in 2008-2009 was 26.5 years, a minimal difference from the past two years.

Grade point averages (GPAs) of matriculants to PA programs are described in Table 25. Average undergraduate overall GPA was 3.44, while science GPA was 3.38.

Table 25. Average Matriculant GPA by Program

	Undergraduate	Undergraduate	Graduate	Graduate
	GPA	Science GPA	GPA	Science GPA
Mean	3.44	3.38	3.52	3.48
P10	3.22	3.10	3.30	3.08
P25	3.36	3.27	3.46	3.30
P50 (mediar	n) 3.44	3.40	3.56	3.56
P75	3.55	3.50	3.60	3.62
P90	3.63	3.60	3.70	3.80
Ν	103	91	29	28

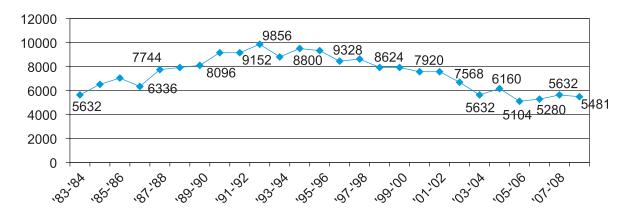
Health care experience hours were also collected through both this survey and self-reported application records through CASPA, with the exception of observations/shadowing, which is not required by CASPA. Percentiles of matriculants' health care experience (HCE) hours for 123 programs are shown in Table 26. Means and percentiles are calculated only for programs that have information in that category. The mean number of hours of direct patient care was 3,143, mean health-related HCE was 1,933 hours, and mean community service was 764 hours. Observation/shadowing was reported by a small number of programs, with an average of 473 hours.

Table 26. Total Health Care Experience Gained by PA Program Matriculants

	Total Hours	Direct Patient Care	Health-Related	Community Service	Observations /Shadowing
Mean	5,481	3,143	1,933	764	473
P10	2,188	1,190	811	340	12
P25	3,222	1,613	1,243	452	26
P50 (median)	4,998	2,435	1,757	635	50
P75	7,000	3,966	2,316	946	100
P90	8,958	5,569	3,275	1,180	757
N	123	119	109	109	13

The trend in matriculant health care experience is shown graphically in Figure 24. The amount of HCE gained by matriculants started on a downward trend in the mid-1990s, but has leveled off in the past few years. For consistency with data reported by CASPA, the number of months used in past PAEA Annual Reports was converted, taking into consideration holidays and weekends, into a number of hours using the following equation: Number of hours = (number of months)*(176 hours/month).

Figure 24. Total Health Care Experience Hours Gained by PA Program Matriculants, 1983-2008



SECTION 8. GRADUATING STUDENTS

Programs were asked to provide information on all of their 2009 graduates, including those in different graduating classes.

Graduating Class

The graduating class was defined as all students who entered the year in which their entering class was scheduled to graduate, regardless of their eventual graduation status; this includes those who graduated, withdrew, and decelerated. The average 2009 graduating class had 43.6 students, of which 40.1 graduated (see Table 27). Percentages of students withdrawn and decelerated were calculated as number of students withdrawn or decelerated divided by the total number of graduating students. The average rates of withdrawal and deceleration were 4.6% and 3.4%, respectively; however, the medians for both rates were lower than the means.

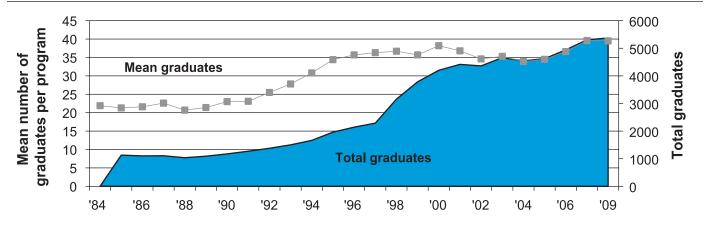
Table 27. Graduated, Withdrawn, and Decelerated Students at PA Programs

		Gra	Graduated		hdrawn	Decelerated		
	Total	Number	% of Total	Number	% of Total	Number	% of Total	
Mean	43.6	40.1	92.0%	2.0	4.6%	1.5	3.4%	
Median	39.5	34.5	93.7%	1.0	3.1%	1.0	2.4%	
Ν	112	112	112	112	112	112	112	

Graduates

The number of graduated students was collected from all programs that graduated students in 2009, including by telephone follow-up for programs that did not respond to the survey. The total number of 2009 graduates for the 136 accredited PA programs that graduated students was 5,375. Figure 25 shows the mean number of graduates per program and the cumulative total of PA graduates since 1984.¹

Figure 25. PA Program Graduates, 1984-2009



¹ Prior to 2009, all graduation numbers were extrapolated from mean graduation numbers calculated from survey responses

Gender and Ethnicity

As shown in Table 28, the mean percentage of male students who withdrew (6.7%) was higher than for female students (4.0%), which was significant at the 0.01 level, according to an unpaired t-test (P = 0.000). The percentage of decelerated male students is also significantly higher than their female counterparts (P = 0.007).

Table 28. Percentages of PA Students Withdrawn and Decelerated, by Gender

		Female						Male				
	Number	% of Total	% Female Grad	% Female Withdrawn	% Female Decelerated		Number	% of Total	% Male Grad	% Male Withdrawn	% Male Decelerated	
Mean	30.9	72.1%	92.9%	4.0%	3.1%		12.6	27.9%	88.8%	6.7%	4.4%	
Median	27.5	74.7%	95.0%	2.6%	0.0%		10	25.3%	91.7%	0.0%	0.0%	
Ν	112	112	112	112	112		112	112	112	112	112	

Of the 4,044 graduated students for whom demographic data were collected in the survey, white students made up 79.1%, followed by 6.7% Asian, 6.3% Hispanic, 4.9% Black or African American, 0.7% Hawaiian or Pacific Islander, and 2.0% with "other" or unknown race/ethnicity.

Calculated by program in Table 29, the ethnic composition of graduating students also closely matched that of all enrollees. The average percentage of white graduating students in each program was 78.5%, with 21.5% non-white. The withdrawal rate for non-white students was higher than for white students. The t-test showed that this difference was significant at a 5% level (P = 0.034), as was the difference in the rates of deceleration (P = 0.000).

Table 29. Race/Ethnicity of Graduating Students by Program

		White						Non-White				
	Number	% of Total	White Grad	% White Withdrawn	% White Decelerated	•	Number	% of Total	Non-White Grad	% Non-White Withdrawn	% Non-White Decelerated	
Mean	33.2	78.5%	73.5%	2.7%	3.3%		9.1	21.5%	18.6%	1.7%	0.8%	
Median	30	83.9%	80.0%	1.7%	0.0%		5	15.4%	14.3%	0.0%	0.0%	
N	103	103	103	103	104		103	103	103	103	103	

Reasons for Withdrawal/Dismissal

As shown in Figure 26, the most common reason for withdrawal or dismissal was academic. For the 258 withdrawn or dismissed students from 82 responding programs, over half were due to academic reasons (55%).

Academic dismissal

Personal withdrawal: Career change

Personal withdrawal: Financial

Personal withdrawal: Medical school

Personal withdrawal: Other

N = 258

0%

20%

40%

60%

Figure 26. Reasons for Withdrawal or Dismissal of PA Students

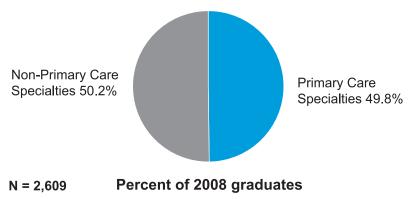
Employment

A total of 91 programs responded to the question on graduating students' employment, of which 76 programs had complete or partial employment information on their 2009 graduates. By the time the survey data were collected, about 22% of the graduates were not yet employed. Of the 2,017 graduates who were employed, 99% were in clinical practice as PAs. Among the few graduates who were not employed as PAs, most were enrolled as full-time students (0.6%), and a few were employed in the health field in a capacity other than a PA (0.2%).

Specialty Choices of 2008 Graduates

Seventy-one programs provided employment information on their 2008 graduates. Of the 2,609 graduates, about half (49.8%) were employed in primary care specialties and half (50.2%) in non-primary care specialties (See Figure 27).¹

Figure 27. Primary Care vs. Non-Primary Care Specialty Choices of 2008 PA Program Graduates



¹ Categories of primary care and non-primary care specialties were not specified in the survey.

Starting Salary of 2008 Graduates

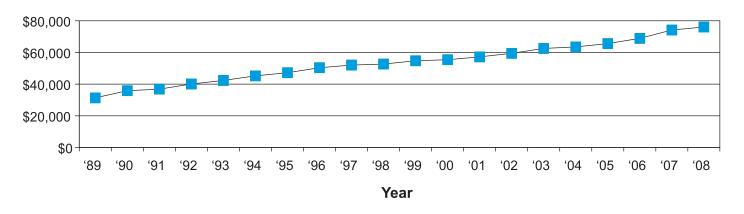
Programs were asked to provide the average salary of their 2008 graduates. As shown in Table 30, the mean salary by program of the 2008 graduates was \$76,059, with a range of \$60,000 to \$90,000.

Table 30. Starting Salary of Recent PA Graduates

	Mean	P10	P25	P50 (Median)	P75	P90	N
Starting salary	\$76,066	\$70,000	\$72,000	\$75,000	\$80,000	\$ 84,500	49

The trendline of PA graduate salaries is shown in Figure 28. Since 1989, the average annual increase has been 4.8%.

Figure 28. PA Program Graduates Starting Salary, 1989-2008



APPENDIX I. LIST OF PA PROGRAMS

Name of Institution	Consortium	Public/Private	Type of Sponsoring Institution	Highest Degree	Survey Status
Albany Medical College	Northeast	Private	Spec/Med	Master's	Yes
Alderson-Broaddus College	Southeast	Private	Bac/Diverse	Master's	Yes
Anne Arundel Community College	East	Public	Assoc/Pub-S-SC	Certificate	Yes
Arcadia University	East	Private	Master's L	Master's	Yes
Arizona School of Health Sciences	West	Private	Spec/Med	Master's	Yes
augsburg College	Midwest	Private	Master's S	Master's	Yes
arry University	Southeast	Private	DRU	Master's	Yes
aylor College of Medicine	Heartland	Private	Spec/Med	Master's	Yes
ethel College	Southeast	Private	Master's S	Master's	Yes
utler University	Midwest	Private	Master's M	Master's	Yes
entral Michigan University	Midwest	Public	DRU	Master's	Yes
hatham University	East	Private	Master's M	Master's	Yes
CUNY/Sophie Davis School of Biomedical Education	Northeast	Public	Master's L	Baccalaureate	No
uyahoga Community College	Midwest	Public	Assoc/Pub-U-MC	Master's	Yes
aemen College	Northeast	Private	Master's M	Master's	Yes
es Moines University	Midwest	Private	Spec/Med	Master's	Yes
eSales University	East	Private	Master's L	Master's	Yes
rexel University	East	Private	RU/H	Master's	Yes
uke University	Southeast	Private	RU/VH	Master's	Yes
uquesne University	East	Private	DRU	Master's	Yes
Youville College	Northeast	Private	Master's L	Master's	Yes
ast Carolina University	Southeast	Public	DRU	Master's	Yes
astern Virginia Medical School	Southeast	Private	Spec/Med	Master's	Yes
mory University	Southeast	Private	RU/VH	Master's	Yes
annon University	East	Private	Master's L	Master's	Yes
eorge Washington University	East	Private	RU/H	Master's	Yes
rand Valley State University	Midwest	Public	Master's L	Master's	Yes
arding University	Southeast	Private	Master's L	Master's	Yes
ofstra University	Northeast	Private	DRU	Baccalaureate	Yes
oward University	East	Private	RU/H	Baccalaureate	Yes

Name of Institution	Consortium	Public/Private	Type of Sponsoring Institution	Highest Degree	Survey Status
Idaho State University	West	Public	DRU	Master's	Yes
Interservice Physician Assistant Program	Heartland	Private	N/A	Master's	Yes
James Madison University	Southeast	Public	Master's L	Master's	Yes
Jefferson College of Health Sciences	Southeast	Private	Spec/Health	Master's	Yes
John H. Stroger Jr. Hospital of Cook County/Malcolm X College	Midwest	Public	Assoc/Pub-U-MC	Master's	Yes
Keck School of Medicine of the University of Southern California	West	Private	RU/VH	Master's	Yes
Kettering College of Medical Arts	Midwest	Private	Spec/Health	Master's	Yes
King's College	East	Private	Master's S	Master's	Yes
Le Moyne College	Northeast	Private	Master's L	Master's	Yes
Lock Haven University of Pennsylvania	East	Public	Master's S	Master's	Yes
Loma Linda University	West	Private	Spec/Med	Master's	Yes
Long Island University	Northeast	Private	Master's L	Baccalaureate	Yes
Louisiana State University Health Sciences Center	Heartland	Public	Spec/Med	Baccalaureate	Yes
Marietta college	Midwest	Private	Bac/Diverse	Master's	Yes
Marquette University	Midwest	Private	RU/H	Master's	Yes
Marywood University	East	Private	Master's L	Master's	Yes
Mass College of Pharmacy & Health Sciences-Boston	Northeast	Private	Spec/Health	Master's	No
Massachusetts College of Pharmacy and Health Sciences-Manchester	Northeast	Private	Spec/Health	Master's	Yes
Medical College of Georgia	Southeast	Public	Spec/Med	Master's	Yes
Medical University of South Carolina	Southeast	Public	Spec/Med	Master's	Yes
Mercer University	Southeast	Private	Master's L	Master's	Yes
Mercy College	Northeast	Private	Master's L	Master's	No
Methodist University	Southeast	Private	Bac/Diverse	Master's	Yes
Methodist University	Southeast	Private	Bac/Diverse	Master's	No
Miami Dade College	Southeast	Public	Assoc/Pub4	Baccalaureate	Yes
Midwestern University-Downers Grove	Midwest	Private	Spec/Med	Master's	Yes
Midwestern University-Glendale	West	Private	Spec/Med	Master's	Yes
Missouri State University	Midwest	Public	Master's L	Master's	Yes

Name of Institution	Consortium	Public/Private	Type of Sponsoring Institution	Highest Degree	Survey Status
Mount Union College	Midwest	Private	Bac/A&S	Master's	Yes
Mountain State University	Southeast	Private	Master's M	Master's	Yes
New York Institute of Technology	Northeast	Private	Master's L	Master's	Yes
Northeastern University	Northeast	Private	RU/H	Master's	Yes
Nova Southeastern University- Fort Lauderdale	Southeast	Private	DRU	Master's	Yes
Nova Southeastern University-Orlando	Southeast	Private	DRU	Master's	Yes
Nova Southeastern University - Southwest Florida (Naples)	Southeast	Private	DRU	Master's	Yes
Oregon Health and Science University	West	Public	Spec/Med	Master's	Yes
Our Lady of the Lake College	Heartland	Private	Spec/Health	Master's	No
PACE University-Lenox Hill Hospital	Northeast	Private	DRU	Master's	Yes
Pacific University	West	Private	DRU	Master's	Yes
Pennsylvania College of Technology	East	Public	Bac/Assoc	Baccalaureate	Yes
Philadelphia College of Osteopathic Medicine	East	Private	Spec/Med	Master's	No
Philadelphia University	East	Private	Master's M	Master's	Yes
Quinnipiac University	Northeast	Private	Master's L	Master's	Yes
Red Rocks Community College	West	Public	Assoc/Pub-S-MC	Certificate	Yes
Riverside Community College	West	Public	Assoc/Pub-U-MC	Master's	Yes
Rochester Institute of Technology	Northeast	Private	Master's L	Baccalaureate	Yes
Rocky Mountain College	West	Private	Bac/Diverse	Master's	Yes
Rosalind Franklin University of Medicine and Science	Midwest	Private	Spec/Med	Master's	Yes
Saint Francis University	East	Private	Master's L	Master's	Yes
Saint Louis University	Midwest	Private	RU/H	Master's	Yes
Salus University	East	Private	Spec/Health	Master's	Yes
Samuel Merritt College	West	Private	Spec/Health	Master's	Yes
San Joaquin Valley College	West	Private	Assoc/PrivFP	Associate	Yes
Seton Hall University	Northeast	Private	DRU	Master's	Yes
Seton Hill University	East	Private	Bac/Diverse	Master's	Yes
Shenandoah University	Southeast	Private	Master's L	Master's	Yes

Name of Institution	Consortium	Public/Private	Type of Sponsoring Institution	Highest Degree	Survey Status
South College	Southeast	Private	Assoc/PrivFP4	Master's	Yes
South University	Southeast	Private	Bac/Assoc	Master's	Yes
Southern Illinois University-Carbondale	Midwest	Public	RU/H	Master's	Yes
Springfield College	Northeast	Private	Master's L	Master's	Yes
5t. John's University	Northeast	Private	DRU	Baccalaureate	Yes
Stanford University	West	Private	RU/VH	Master's	Yes
State University of New York Downstate Medical Center	Northeast	Public	Spec/Med	Baccalaureate	Yes
Stony Brook University	Northeast	Public	RU/VH	Master's	Yes
Texas Tech University Health Sciences Center	Heartland	Public	Spec/Med	Master's	Yes
Touro College School of Health Sciences	Northeast	Private	Master's L	Master's	Yes
Touro College-Manhattan	Northeast	Private	Master's L	Master's	Yes
Touro University-California	West	Private	Master's L	Master's	Yes
Touro University-Nevada	West	Private	Master's L	Master's	No
Towson University CCBC Essex	East	Public	Master's L	Master's	Yes
Trevecca Nazarene University	Southeast	Private	DRU	Master's	Yes
Union College	Heartland	Private	Bac/Diverse	Master's	Yes
University of Alabama At Birmingham	Southeast	Public	RU/VH	Master's	Yes
University of California-Davis	West	Public	RU/VH	Certificate	Yes
University of Colorado Denver, Anschutz Medical Campus	West	Public	RU/VH	Master's	Yes
University of Detroit Mercy	Midwest	Private	Master's L	Master's	Yes
University of Findlay	Midwest	Private	Master's L	Baccalaureate	Yes
University of Florida	Southeast	Public	RU/VH	Master's	Yes
University of Iowa	Midwest	Public	RU/VH	Master's	Yes
University of Kentucky	Southeast	Public	RU/VH	Master's	Yes
University of Maryland-Eastern Shore	East	Public	Master's S	Baccalaureate	No
University of Medicine and Dentistry of New Jersey	Northeast	Public	Spec/Med	Master's	Yes
University of Nebraska Medical Center	Heartland	Public	Spec/Med	Master's	Yes
University of New England	Northeast	Private	Master's L	Master's	No

Name of Institution	Consortium	Public/Private	Type of Sponsoring Institution	Highest Degree	Survey Status
University of New Mexico	West	Public	RU/VH	Baccalaureate	Yes
University of North Dakota	Midwest	Public	RU/H	Master's	Yes
University of North Texas Health Science Center at Fort Worth	Heartland	Public	Spec/Med	Master's	Yes
University of Oklahoma	Heartland	Public	Spec/Med	Master's	Yes
University of Oklahoma-Tulsa	Heartland	Public	Spec/Med	Master's	Yes
University of Saint Francis (IN)	Midwest	Private	Master's S	Master's	Yes
University of South Alabama	Southeast	Public	Master's L	Master's	Yes
University of South Dakota	Midwest	Public	DRU	Master's	Yes
University of St. Francis (NM)	West	Private	Master's L	Master's	Yes
University of Texas Health Science Center at San Antonio	Heartland	Public	Spec/Med	Master's	Yes
University of Texas Medical Branch	Heartland	Public	Spec/Med	Master's	Yes
University of Texas Pan American	Heartland	Public	Master's L	Master's	Yes
University of Texas Southwestern Medical Center	Heartland	Public	Spec/Med	Master's	Yes
University of Toledo	Midwest	Public	RU/H	Master's	Yes
University of Utah	West	Public	RU/VH	Master's	Yes
University of Washington MEDEX	West	Public	RU/VH	Master's	Yes
University of Wisconsin-LaCrosse- Gundersen-Mayo	Midwest	Public	Master's L	Master's	Yes
University of Wisconsin-Madison	Midwest	Public	RU/VH	Master's	Yes
Wagner College	Northeast	Private	Master's M	Master's	Yes
Wake Forest University	Southeast	Private	RU/H	Master's	Yes
Wayne State University	Midwest	Public	RU/VH	Master's	Yes
Weill Cornell University Medical College	Northeast	Private	Spec/Med	Certificate	No
Western Michigan University	Midwest	Public	RU/H	Master's	Yes
Western University of Health Sciences	West	Private	Spec/Med	Master's	Yes
Wichita State University	Heartland	Public	RU/H	Master's	Yes
Wingate University	Southeast	Private	Bac/A&S	Master's	Yes
Yale University	Northeast	Private	RU/VH	Master's	Yes
York College of the City University of New York	Northeast	Public	Bac/Diverse	Baccalaureate	Yes

APPENDIX II. HISTORICAL TABLES

Table A. Financial Support Received by PA Programs, 1985–2009

	Total Budget		Sponso	oring Institu	tion	Federal Grant/Contract				
	Mean Budget Amount (\$)	% Change	Mean Budget Amount (\$)	% Change	% Receiving	Mean Budget Amount (\$)	% Change	% Receiving	% in Total Budget	
1984-1985	276,919		169,581		84	130,889		73	35	
1985-1986	305,868	10.5	181,171	6.8	92	125,484	-4.1	82	41	
1986-1987	334,690	9.4	189,135	4.4	88	126,457	0.8	60	39	
1987-1988	328,444	-1.9	178,590	-5.6	87	117,429	-7.1	78	38	
1988-1989	371,386	13.1	200,700	12.4	91	125,118	6.5	77	34	
1989-1990	381,978	2.9	211,400	5.3	80	127,600	2.0	75	33	
1990-1991	409,745	7.3	235,780	11.5	87	128,222	0.5	77	31	
1991-1992	470,063	14.7	257,182	9.1	92	129,243	0.8	77	28	
1992-1993	457,200	-2.7	270,346	5.1	89	143,514	11.0	64	31	
1993-1994	568,564	24.4	315,085	16.5	85	137,514	-4.2	64	24	
1994-1995	664,797	16.9	324,889	3.1	93	144,926	5.4	71	22	
1995-1996	673,975	1.4	373,957	15.1	92	152,514	5.2	52	23	
1996-1997	648,871	-3.7	410,456	9.8	87	152,300	-0.1	45	22	
1997-1998	679,096	4.7	441,129	7.5	94	157,765	3.6	38	22	
1998-1999	740,898	9.1	501,150	13.6	88	173,030	9.7	41	23	
1999-2000	756,946	2.2	466,641	-6.9	89	150,111	-13.2	35	20	
2000-2001	871,824	15.2	487,739	4.5	90	123,055	-18.0	31	14	
2001-2002	873,977	0.2	504,324	3.4	90	154,834	25.8	33	18	
2002-2003	866,612	-0.8	574,416	13.9	86	159,334	2.9	37	18	
2003-2004	954,422	10.1	654,339	13.9	86	141,762	-11.0	40	15	
2004-2005	986,987	3.4	672,444	2.8	88	138,982	-2.0	38	14	
2005-2006	990,527	0.4	735,508	9.4	88	177,408	27.6	37	18	
2006-2007	1,077,814	8.8	795,539	8.2	90	134,907	-24.0	31	13	
2007-2008	1,314,505r	26.6	908,472	14.2	94	124,212	-7.9	16	11	
2008-2009	1,276,432	-6.4	954,696	5.1	91	108,587	-12.6	16	11.0	

Table B. PA Student Expenses and Financial Aid, 1985–2009

	Tuition (Mean)					Tuition + Incidental Costs (Mean)					
Year	Resident (\$)	% Change	Non-Resident (\$)	% Change	Resident (\$)	% Change	Non-Resident (\$)	% Change	% of Class		
1984-1985	6,378	-	8,986	-	7,669	-	9,962	-	65		
1985-1986	7,098	11.3	9,565	6.4	8,588	12	11,055	11.0	65		
1986-1987	7,626	7.4	10,451	9.3	9,247	7.7	12,155	10.0	63		
1987-1988	8,012	5.1	10,775	3.1	9,643	4.3	12,494	2.8	63		
1988-1989	9,472	18.2	13,660	26.8	11,485	19.1	15,681	25.5	67		
1989-1990	9,978	5.3	14,174	3.8	11,706	1.9	15,902	1.4	69		
1990-1991	10,620	6.4	14,614	3.1	12,495	6.7	16,511	3.8	71		
1991-1992	11,714	10.3	16,240	11.1	13,890	11.2	18,440	11.7	71		
1992-1993	13,092	11.8	17,772	9.4	15,694	13	20,375	10.5	71		
1993-1994	14,470	10.5	18,774	5.6	17,153	9.3	21,457	5.3	71		
1994-1995	16,030	10.8	21,106	12.4	18,676	8.9	23,752	10.7	77		
1995-1996	17,872	11.5	22,702	7.6	21,308	14.1	26,132	10.0	79		
1996-1997	20,132	12.6	25,088	10.5	23,695	11.2	28,775	10.1	79		
1997-1998	20,296	0.8	26,228	4.5	24,057	1.5	29,989	4.2	85		
1998-1999	22,428	10.5	27,922	6.5	26,653	10.8	32,147	7.2	83		
1999-2000	24,407	8.8	31,001	11.0	28,840	8.2	35,434	10.2	84		
2000-2001	28,048	14.9	34,662	11.8	32,684	13.3	39,298	10.9	86		
2001-2002	28,036	0	35,536	2.5	32,810	0.4	40,310	2.6	88		
2002-2003	30,949	10.4	38,423	8.1	36,154	10.2	43,628	8.2	86		
2003-2004	34,167	10.4	41,723	8.6	39,360	8.9	46,884	7.5	89		
2004-2005	37,823	10.7	46,344	11.1	43,309	10.0	51,730	10.3	88		
2005-2006	40,697	7.6	48,549	4.8	45,910	6.0	53,843	4.1	89		
2006-2007	44,637	9.7	52,225	7.6	51,019	11.1	58,671	9.0	89		
2007-2008	48,649	9.0	57,280	9.7	54,954	7.7	63,647	8.5	91		
2008-2009	50,611	4	61,088	6.6	56,220	2.3	66,871	5.1	92		

Table C. Enrollment and Capacity for All Classes, 1985–2009

Academic Year	Maximum Capacity	Current Enrollment	Capacity Unfilled (%)	N
1984-1985	58.2	47.0	17.8	39
1985-1986	60.4	46.7	21.3	44
1986-1987	61.9	49.1	18.8	47
1987-1988	57.4	47.3	19.6	48
1988-1989	56.1	45.6	16.3	48
1989-1990	58.9	50.2	14.8	45
1990-1991	68.1	56.6	16.9	50
1991-1992	69.7	62.1	9.2	50
1992-1993	71.8	65.1	8.9	57
1993-1994	72.7	67.9	5.1	56
1994-1995	85.4	78.6	5.5	61
1995-1996	83.2	79.4	6.1	68
1996-1997	83.6	77.3	7.3	77
1997-1998	84.1	81.3	9.8	95
1998-1999	87.4	82.5	8.5	96
1999-2000	83.3	76.7	9.0	105
2000-2001	86.5	78.8	7.1	102
2001-2002	82.8	76.0	8.2	105
2002-2003	86.7	75.9	10.4	103
2003-2004	89.8	80.3	9.3	109
2004-2005	91.9	85.1	8.2	110
2005-2006	93.2	87.5	6.2	105
2006-2007	95.9	91.3	6.1	99
2007-2008	101.5	97.5	5.2	112
2008-2009	109.7	101.5	3.4	118

Table D. First-Year Gender and Ethnicity, 1984–2009

	Female			Vlale	W	hite	Non-White		Total	
Academic Year	Mean	% of Total	Mean	% of Total	Mean	% of Total	Mean	% of Total	Mean	N
1983-1984	13.6	58.4%	9.7	41.6%	20.7	86.2%	4	13.8%	24.0	43
1984-1985	14.6	61.6%	9.1	38.4%	20.3	83.4%	4.1	16.6%	24.1	43
1985-1986	15.3	63.0%	9.0	37.0%	20.9	85.3%	3.6	14.7%	24.3	41
1986-1987	15.5	62.2%	9.4	37.8%	19.6	78.8%	5.3	21.1%	24.9	47
1987-1988	15.7	61.6%	9.9	38.4%	19.7	77.7%	5.9	22.3%	25.6	47
1988-1989	16.2	62.3%	9.8	37.7%	20.8	79.7%	5.3	20.3%	25.9	46
1989-1990	16.4	62.8%	9.7	37.2%	20.9	80.1%	5.2	19.9%	26.1	46
1990-1991	16.3	55.1%	13.3	44.9%	24.6	82.3%	5.3	17.7%	29.6	49
1991-1992	19.4	60.2%	12.8	39.8%	26	81.0%	6.1	19.0%	32.2	47
1992-1993	20.7	59.8%	13.9	40.2%	26.9	82.5%	5.7	17.5%	35.0	56
1993-1994	22.2	61.5%	13.9	38.5%	29.3	82.3%	6.3	17.7%	37.0	55
1994-1995	24.4	60.2%	16.1	39.8%	33.2	77.5%	8.8	20.9%	41.1	55
1995-1996	22.8	58.2%	16.4	41.8%	32.4	77.7%	9.3	22.3%	39.2	71
1996-1997	23.5	61.4%	14.8	38.6%	31.3	79.6%	8.0	20.4%	38.3	77
1997-1998	24.4	61.9%	15.0	38.1%	32.4	79.2%	8.5	20.8%	39.4	95
1998-1999	25	62.5%	15.0	37.5%	32.9	78.9%	8.8	21.1%	40.0	91
1999-2000	24	62.8%	14.2	37.2%	30.7	77.9%	8.7	22.1%	40.2	103
2000-2001	24.8	64.9%	13.4	35.1%	30.2	75.1%	10.0	24.9%	38.2	102
2001-2002	26.7	68.1%	12.5	31.9%	29	77.3%	8.5	22.7%	39.2	105
2002-2003	24.7	69.6%	10.8	30.4%	29.8	77.4%	8.7	22.6%	35.5	103
2003-2004	26.9	70.4%	11.3	29.6%	30.1	75.6%	9.7	24.4%	38.2	108
2004-2005	28.4	70.6%	11.8	29.4%	33.1	77.9%	9.4	22.1%	40.2	104
2005-2006	29.8	73.0%	11	27.0%	32.8	77.2%	9.7	22.8%	40.8	105
2006-2007	30.5	72.1%	11.8	27.9%	33	76.7%	10	23.3%	42.3	100
2007-2008	31.1	73.1%	12.4	26.9%	34.8	77.4%	9.5	21.8%	43.5	112
2008-2009	32.6	72.70%	13	27.30%	33.5	77.70%	8.8	22.30%	45.6	118

Table E. Health Care Experience of PA Program Entering Classes, 1984–2009

Academic Year	Months	Hours
1983-1984	32	5632
1984-1985	37	6512
1985-1986	40	7040
1986-1987	36	6336
1987-1988	44	7744
1988-1989	45	7920
1989-1990	46	8096
1990-1991	52	9152
1991-1992	52	9152
1992-1993	56	9856
1993-1994	50	8800
1994-1995	54	9504
1995-1996	53	9328
1996-1997	48	8448
1997-1998	49	8624
1998-1999	45	7920
1999-2000	45	7920
2000-2001	43	7568
2001-2002	43	7568
2002-2003	38	6688
2003-2004	32	5632
2004-2005	35	6160
2005-2006	29	5104
2006-2007	30	5280
2007-2008	32	5632
2008-2009	31	5481

Table F. Average Graduate Salaries, 1989–2009

Graduation Year	Average Salary
1989	\$31,352
1990	\$35,856
1991	\$36,815
1992	\$40,079
1993	\$42,332
1994	\$45,228
1995	\$47,202
1996	\$50,362
1997	\$52,026
1998	\$52,664
1999	\$54,761
2000	\$55,415
2001	\$57,218
2002	\$59,434
2003	\$62,540
2004	\$63,497
2005	\$65,595
2006	\$68,886
2007	\$74,154
2008	\$76,066

APPENDIX III. SURVEY INSTRUMENT

Section 1. General Information

1.	Name of sponsoring institution							
2.	Type of sponsoring institution: ☐ Academic health center ☐ University ☐ 4-year college ☐ Community college	☐ Hospital☐ Military☐ Other, specify						
3.	Administrative housing: ☐ School of medicine ☐ School of allied health/health profess ☐ Other, specify	☐ Science department sions						
4.	Type of institution: ☐ Public	□ Private						
5.	Year first class enrolled							
6.	Length of the professional phase of the	program in months						
7.	Program start month; program end mor	nth						
8.	Credentials awarded (Select ALL that apply): ☐ Certificate ☐ Associate							
	Baccalaureate □ Bachelor of Science (BS) □ Bachelor of Science in Physician Assistant (BSPA)/Bachelor of Science in Physician Assistant Studies (BSPAS)/ Bachelor of Physician Assistant Studies (BPAS)/Bachelor of Physician Assistant (BPA) □ Bachelor of Medical Science (BMS) □ Bachelor of Clinical Health Services (BCHS) □ Bachelor of Health Science (BHS)/Bachelor of Science in Health Science (BSHS) □ Other, specify							
	 Master of Science (MS) □ Master of Physician Assistant Studies (MPAS)/Master of Science in Physician Assistant Studies (MSPAS)/ Master of Physician Assistant Practice (MPAP)/Master of Physician Assistant (MPA) □ Master of Health Science (MHS)/Master of Science in Health Science (MSHS) □ Master of Medical Science (MMS/MMSc)/Master of Science in Medicine (MSM) □ Master of Public Health (MPH) □ Other master's, specify 							
	☐ Other, specify							
9.	Was there an addition to your program ☐ Certificate ☐ Associate ☐ Baccalaureate	s credential from the previous year? (Check ALL that apply): Master's Dual degree option Other						
10.	Was there a change to your program's of Certificate was changed to: Associate was changed to: Baccalaureate was changed to: Certificate Associate Baccalaureate	Acredential from the previous year? (Select ALL that apply): Master's was changed to: Dual degree option was changed to: Other degree was changed to: Master's Dual degree option Other						

Section 2. Financial Information

1.	Program Budget: Please provide the amount	es			
	during the 2008-2009 fiscal year.		Amou	nt	Ongoing
	Budget from sponsoring institution		711100	110	ongonig
	(Directly given to the program includi		\$		
	Tuition & fees received directly by progra	m	\$		
	Federal grant/contract		\$		
	State grant/contract		\$		
	AHEC support		\$		
	Private foundation		\$		
	Gifts/grants/endowments:		*		
	Private donation		\$		
	Industry		\$		
	Other, specify		\$		
2.	Program Expenses: Please indicate the approtent total budget for the 2008-2009 fiscal year Faculty salaries (including adjunct faculty Staff salaries Instructional equipment (e.g., mannequin Technology (e.g., computer software) Faculty development (including conference Support for faculty travel to clinical sites Support for student travel for clinical train Precepting Student housing Recruitment/marketing Accreditation/professional fees Administration (e.g., phone, postage, con Specify other major expenses	ar (these percentages do not i salaries) ns) ces) ning		d up to 100%%%%%%% _	
3.	Please provide the estimated current total tu entire professional phase of the PA program. Resident: \$		ent will incur fo Nonresident		
4.	Estimate the total incidental costs (e.g., texts academic expenses) incurred by a student du expenses (e.g., transportation, food, housing	iring the entire program. Do r	required techr	nology or s	
5.	Please select the equipment that is required Diagnostic equipment Laptop computer	oy your program and indicate PDA Other	who pays for	it. (Check	ALL that apply)
	Who paid for each item? ☐ Student ☐ Program	□ Sponsoring institution□ Other			
	What percentage of the 2008-2009 enro	lled class received financial aid	d?	% o	r 🛭 I don't know

Section 3. Additional Program Information

1.	Did your program have multiple didactic sites (satell ☐ Yes ☐ No	ites)?
2.	. Did your program have an advertised part-time opti ☐ Yes ☐ No	on?
3.	Did your program offer any asynchronous, self-pace ☐ Yes ☐ No	ed, Web-based courses in an exclusively distance learning format?
4.	Did your program offer international rotations? ☐ Yes ☐ No If "Yes," were they required rotations or elective rot ☐ Required ☐ Elective	tations?
5.	Did your program pay clinical sites to precept your s ☐ Yes ☐ No If "yes," who did you pay? ☐ Clinical sites ☐ Both ☐ Clinical preceptor	students in the 2008-2009 academic year?
6.	□ Library access□ Books and equipment□ On-site clinical precepting supportby program faculty	 ? (Check ALL that apply) I Parking on campus I Certificate of appreciation I Adjunct faculty status I Recognition events I Tickets for athletic or cultural events I Other, specify
7.	□ Online clinical logging system□ Web-based testing	Check ALL that apply) I Electronic classrooms I Audience response systems I Virtual anatomy I Web-based evaluations
8.	☐ On-campus health service ☐	available for students and who paid for each of the Academic counseling Psychological counseling/support Fitness/wellness center/facilities
	☐ Student ☐	Sponsoring institution Other

Section 4. Program Personnel

1.	Which of the following benefits were available to your fa-	culty? (Check ALL	. that apply)
	☐ Non-vacation time to attend continuing education	conferences	☐ Time for research/scholarly activities
	☐ Funding to attend continuing education conferenc	☐ Time to pursue advanced degree	
	☐ Non-vacation time to attend professional organizational meetings		☐ Tuition remission for advanced degree
	☐ Funding to attend professional organizational mee	tings	☐ Sabbatical
	☐ Time for clinical practice		☐ Other, specify
2.	Indicate which of the following were offered by the progr	ram/sponsoring ir	nstitution for the
	faculty and staff of your program. (Check ALL that apply)		
	☐ Retirement plan	Flexible spen	ding account
	☐ Health insurance	☐ Long-term d	isability insurance
	☐ Dental insurance	☐ Short-term d	lisability insurance
	☐ Life insurance	Other, specif	y
3.	Was a tenure track available to your faculty? ☐ Yes ☐ No		
4.	Was your faculty unionized? ☐ Yes ☐ No If "yes," specify the name of the union		
5.	What barriers, if any, did you encounter trying to hire new	v faculty? (Check	ALL that apply)
	☐ Not applicable	☐ Lack of cand	idates
	☐ Salary	☐ Candidates′	lack of teaching experience
	☐ Degree requirements	☐ Area cost of	living
	☐ Lifestyle	Other, specif	у
	☐ Location		
6.	Estimate the percentage of the curriculum taught by your	r program's core f	aculty?%
7.	Enter the number of employees: faculty;	staff	
	Employee Profile		
	Employee ID or Last Name:		
	FTE:%		
	Category:	Gender:	
	☐ Faculty	☐ Male	
	□ Staff	☐ Female	
	Ethnicity (as self-identified by individual. Please spe if you check "Asian," you may also specify as "Ch		mation is known, e.g.,
	☐ White (non-Hispanic)	Asian, specif	у
	☐ Black/African American (non-Hispanic)	Pacific Island	er, specify
	American Indian or Alaskan Native	☐ Other	
	☐ Hispanic/Latino, specify	■ No answer	

Section 4. Program Personnel (continued)

	ry Position (If the actual position is different f t match. If there is no match, select "Other"		
	Dean		Admissions director/coordinator
	Department chair		Faculty
	Division chief/head		Education coordinator (Staff)
	Program director		Data analyst
	Medical director		Evaluation specialist
	Associate/assistant director		Administrative staff
	Academic coordinator		Technology/information specialist
	Clinical coordinator		Other, specify
	Research coordinator		
	positions (If the actual position is different fr n, select "Other" and then specify. Check AL		the given choices, please select the closest match. If there is no nat apply):
	Dean		Admissions director/coordinator
	Department chair		Faculty
	Division chief/head		Education coordinator (Staff)
	Program director		Data analyst
	Medical director		Evaluation specialist
	Associate/assistant director		Administrative staff
	Academic coordinator		Technology/information specialist
	Clinical coordinator		Other, specify
	Research coordinator		
PA status:	Tenure s	stat	us:
☐ PA			☐ Tenured
☐ No	on PA		□ On tenure track
A 1 '			□ Neither
Academic			Assistant professor
	ofessor Peritus		Assistant professor Lecturer/Instructor
	sociate professor		Other
	legree/credential:	_	
-	D, MD or other doctoral degree		Certificate
□ Ma	_		Other
	ccalaureate		None
☐ As	sociate		
Please inc	dicate the full-time equivalent annual salary fo	or t	his person at the end of the
2008-200	09 academic year. (For departed personnel, in	ndid	cate the salary at time of departure): \$
Did this fa	aculty member work clinically in the past aca	den	nic year?
☐ Yes	s 🗅 No		I don't know

If "Yes," average number of hours per week:	hours
Did the clinical work generate income? Yes, income retained by faculty member Yes, income retained by program/institution No, volunteer position (no income)	
Did this faculty member END employment in the 2008 Ves No (if "No," skip next	
If "Yes," please indicate the stated reason: Career advancement Return to clinical practice Geographic relocation Retirement Return to school	 □ Family obligations □ Job dissatisfaction □ Salary dissatisfaction □ Involuntary termination □ Other
If the faculty member was hired in the 2008-2009 aca immediate past employment. PA education Other educational program	□ Clinical practice □ Other, specify
If this faculty member was hired in the 2008-2009 acc	ademic year, how long did it take to fill the position?
How many qualified applications did you receive for the	his position?

Section 5. Application and Admissions

6. Did your program require an interview from prospective students?

7. Did your program grant advanced placement credit?

☐ No

□ No

 Application deadline month Select the student recruitment strategies that your program used during the 2008-2009 academic year. (Check ALL that apply) 							
☐ Brochures	☐ Schoo	☐ School visits					
Information sessionsWebsites	☐ Other,	specify					
3. What credential(s)/degree(s)	do you require for entry to	your program?					
Prerequisite Degree		Credential/Do	egree Offered				
(Upon admission)	Certificate	Associate	Baccalaureate	Master's			
Degree not required							
Certificate							
Baccalaureate							
 Please check all prerequisite Please check all prerequisite Anatomy Biology Biochemistry General chemistry Organic chemistry 	courses that apply. Please d Genet Microl Physio Math:	o not check if the courses ics piology logy Algebra/Calculus ics					
5. Please indicate your prograr	·	·					
□ Required	Preferred	☐ Not required					

Yes

Yes

Section 6. Matriculants

1.	What was the total number of	enrollees in the	e professional pha	ase of your program in the 2008-2009 academic year?		
2.	Indicate the maximum capacity of your program in the 2008-2009 academic year and the number of full-time and part-time students by gender for each class.					
	Maximum capacity Female enrollees Male enrollees	1st year	2nd year 	3rd year		
3.	Indicate the number of student	s in your progr	am who have bee	en decelerated in the 2008-2009 academic year.		
4.	Indicate the number of student	s in your progr	am who have wit	thdrawn or been dismissed during the last academic year.		
*(uestions 5-9 refer to the 2008-2	2009 matriculat	ting class.			
5.	Please enter the number of stu White Black/African American Am. Ind. or Alaska Native Hispanic/Latino		Asia Pacit Othe	fic Islander		
6.	Please specify the average age Average age	and age range	,	09 matriculating classto		
7.	For the most recent matriculati Avg. undergrad. Avg. undergrad. science Avg. graduate Avg. graduate science	ng class, please	e enter the averag	ge undergraduate grade point average (GPA) for all courses.		
8.	What was the average number Direct patient care Health related Community service Observation/shadowing	of hours of he	alth care experier	nce (HCE) in your most recent matriculating class?		
9.	For the 2008-2009 matriculatir No academic degree Associate degree Baccalaureate degree Master's degree Doctoral degree	ng class, please	indicate the num	nber of students by their highest degree earned upon entry.		
10	. Did your program require a bac	kground check	c upon matriculati	tion in the 2008-2009 academic year?		
11	. Did your program have a policy	for mandatory	/ drug testing?			
	☐ Yes	□ No				

Section 7. Graduating Students

1.	Please provide the number of female and male graduating students.				
		Graduated	Withdrew	Decelerated	
	Female				
	Male				
	Please enter the number of graduating				
		Graduated	Withdrew	Decelerated	
	White				
	Black/African American				
	American Ind./Al. Native				
	Hispanic/Latino Asian				
	Pacific Islander				
	Other				
	No answer				
<u>?</u>	(Please DO NOT include decelerated or p □ Academic dismissal □ Personal withdrawal □ Financial □ Career change □ Medical school □ Other, specify	part-time studen	ts).	from the program for the following reasons.	
3.	Please indicate the number of 2009 gra	· ·			
	(Count each graduate only ONCE, using	their PRINCIPAL	. employment cat	egory).	
	Employed in clinical practice as PA				
	Employed in administration Employed in education as PA				
	Employed in research as a PA		 -		
	Employed in the health field, not a	is PA			
	Enrolled as full-time student				
	Employed in a field other than me	d./health			
	Other				
	Not yet employed				
	Deceased				
	Unknown				
1.	Indicate the number of 2008 graduates		-	n-primary care medical specialties.	
	Primary care	Non-primary ca			
5.	What was the average reported annual \$	starting salary (a	djusted for 1.0 F	TE) of the 2008 graduating class?	
	We do not collect this informatio	n			

APPENDIX IV. LIST OF ANNUAL REPORTS

- 1. Oliver D, Baker J, Donahue W. First Annual Report on Physician Assistant Educational Programs in the United States, 1984-85. Association of Physician Assistant Programs; May 1985.
- 2. Oliver D, Baker J, Donahue W. Second Annual Report on Physician Assistant Educational Programs in the United States, 1985-86. Association of Physician Assistant Programs; May 1986.
- 3. Oliver D, Baker J, Donahue W. Third Annual Report on Physician Assistant Educational Programs in the United States, 1986-87. Association of Physician Assistant Programs; May 1987.
- 4. Oliver D, Baker J, Donahue W. Fourth Annual Report on Physician Assistant Educational Programs in the United States, 1987-88. Association of Physician Assistant Programs; May 1988.
- 5. Oliver D, Baker J, Donahue W. Fifth Annual Report on Physician Assistant Educational Programs in the United States, 1988-89. Association of Physician Assistant Programs; May 1989.
- 6. Oliver D, Baker J, Donahue W. Sixth Annual Report on Physician Assistant Educational Programs in the United States, 1989-90. Association of Physician Assistant Programs; May 1990.
- 7. Oliver D, Baker J, Donahue W. Seventh Annual Report on Physician Assistant Educational Programs in the United States, 1990-91. Association of Physician Assistant Programs; May 1991.
- 8. Oliver D, Baker J, Donahue W. Eighth Annual Report on Physician Assistant Educational Programs in the United States, 1991–92. Association of Physician Assistant Programs; May 1992.
- 9. Oliver D, Baker J, Donahue W. Ninth Annual Report on Physician Assistant Educational Programs in the United States, 1992-93. Association of Physician Assistant Programs; May 1993.
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