BYTHE NUMBERS

30TH REPORT ON PHYSICIAN ASSISTANT EDUCATIONAL PROGRAMS IN THE UNITED STATES

PAEA

2015

Physician Assistant Education Association

Cover image: Monet's Garden Basal ganglion neurons in mouse brain

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INTRODUCTION

Physician Assistant Education Association

Founded in 1972, the Physician Assistant Education Association (PAEA), 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. At the time of the 2014 Program Survey administration in June 2014, PAEA represented 186 member programs. As of October 2015, there were 200 accredited PA programs. For more information about PAEA, its products, and services, visit **PAEAonline.org.**

METHODS

The Survey Instrument

The survey consisted of eight sections:

General Information: Includes geographic location of programs, credentials awarded, year first class enrolled, program length, and program start and end months.

Financial Information: Includes program budget sources, expense areas, tuition and fees, incidental costs for students, and financial aid information.

Program Personnel: Includes faculty teaching load, core faculty and support staff fulltime equivalent (FTE), and barriers to hiring new faculty.

Enrolled Students: Includes demographic and academic information about enrolled students.

2014 Cohort: Includes information on student graduation, attrition and deceleration, and characteristics of recent graduates.

Healthy People 2020: Includes information on the inclusion of core clinical prevention and population health content within PA program curricula as requested from the United States Department of Health and Human Services for its Healthy People 2020 initiative. The data are not included in this report.

Clinical Training Sites: Includes information on securing and maintaining clinical training sites and preceptors.

Support to Advance Research (STAR): The PAEA Support to Advance Research (STAR) Program is a new initiative developed by the PAEA Research Council and research staff that allows faculty of PAEA member programs to submit questions to include in the Annual Program Survey to obtain data for their own research. The data were provided to the principal investigator of the project and will appear in another publication.

The data in all sections of the survey reflect the 2013-2014 academic year, except those relating to financial information. The financial information is based on the 2013-2014 fiscal year, as defined by each program.

Unless otherwise indicated, the survey covers the professional phase of the program. The "professional phase" is defined as the portion of a PA student's education that is conducted in an educational program accredited by the Accreditation Review Commission on Education for the Physician Assistant (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.

Survey Administration and Enhancements

The online 2014 Program Survey was sent to 186 member PA program directors on June 16, 2014. PAEA Research Department staff sent reminders and conducted follow-up calls starting in July and continuing until all 186 PAEA members had completed the survey. The survey closed in September 2014. The survey yielded an overall response rate of 100% based on the 186 respondents; however, the response rate was lower for some items.

There were numerous enhancements made to the 2014 Program Survey. This was the second year that graduate data were collected using a cohort system. By continuing to collect all student data by cohort, total enrollment, deceleration, and withdrawal data will be more accurate and easier to track. This also will enable more accurate projections of enrollment and graduation rates.

Additionally, beginning with the 2014 administration, the employee profile was removed from the Program Survey and included in the 2014 PA Program Faculty and Directors Survey. The 2014 Faculty & Directors Research Report was published in March 2015. With this release of the 2014 Program Survey data, the report assumed a new name in order to reduce confusion between this report and PAEA's Annual Report, which highlights the Association's accomplishments and financial information.

PAEA has been tracking program survey data since 1985 and includes these historical data in many of the figures displayed in this By the Numbers report. Due to page restrictions and changes to future design elements of the 31st Report, only historical data dating back to 1995 will be included moving forward. PAEA anticipates these changes to be beneficial and looks forward to members' feedback.

Data Editing and Analysis

Responses to questions were checked for logical consistency and 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. Responses that fell outside of the reasonable parameters were not included in the analyses. The number of responses to individual survey items varied slightly. The tables and figures presented in this report display aggregate data from the respondents. All data are reported for PAEA member programs only.

Program personnel and student data included in this report are provided by the PA program and may vary in response rate and accuracy; thus, yearly fluctuations in the data do occur. If substantial changes in any data occur in a particular year, PAEA recommends waiting for the following year's report before taking any permanent actions affecting programs, in order to identify if the change was unique to that year (i.e., due to response rate or random fluctuation).

In general, analyses of the data consisted of producing descriptive statistics on the variables of interest (i.e., percentage, arithmetic mean (*M*), median (*Mdn*), standard deviation (*SD*), range, and percentiles). Data were not reported when there were fewer than five values in a category for sensitive data fields (e.g., gender, ethnicity, and race). In some cases, data were not reported and are indicated by "NR." For some tables and figures, percentages will not equal 100% due to rounding or when multiple responses were allowed. Total columns on tables and figures may be designated by n (P) for programs, n (F) for faculty, or n (S) for students.

DEFINITIONS

2014 Cohort: The 2014 cohort, or class, is defined as all students who entered into the PA program expecting to graduate on time in 2014, regardless of their eventual graduation status.

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."

Academic year: As noted in later sections, there is variability in program length as well as the beginning month for each cohort in PA educational programs. Classes matriculate and graduate in nearly every month of the calendar year. For the purpose of this report, programs were asked to use 2013-2014 as the parameter for determining the academic year. For example, a program that begins in July would use July 2013 through August 2014.

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

Decelerated students: Students who do not advance to graduation with the same class with which they matriculated.

Fiscal year: Programs were asked to use the prior fiscal year (i.e., 2013-2014) used by their institution. Typically, a fiscal year would be July 1–June 30, but some institutions use a calendar year (January 1–December 31) or federal fiscal year (October 1–September 30).

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 did involve indirect patient care (e.g., lab technician, front office worker, hospital personnel, research associate).

Hispanic: Hispanic is an abbreviation for "Hispanic, Latino, or Spanish in origin."

Maximum capacity: Maximum number of students that could potentially be enrolled in the professional phase of a program for each admission cycle that is set by the sponsoring institution and approved by the ARC-PA.

Non-Hispanic: Non-Hispanic is an abbreviation for "non-Hispanic, Latino, or Spanish in origin."

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

Professional phase: Refers to the 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.

U.S. Census Bureau Regions: The 50 states and the District of Columbia are divided into four regions. The U.S. Census Bureau does not consider the U.S. Virgin Islands, Puerto Rico, and other U.S. territories in their geographic divisions.

SECTION 1. GENERAL INFORMATION

Characteristics of Sponsoring Institutions

Over half (65.6%) of programs indicated that their sponsoring institutions are private: 62.4% private, non-profit, and 3.2% private, for-profit. Only 32.8% of programs are in public institutions. There is one military and two public/private hybrid programs. One-third of programs indicated that their sponsoring institution is an academic health center (AHC). Fifty-one percent of programs are located in a college or school of allied health, health professions, or health sciences. Nearly 18% of programs are located in a department of PA studies or PA program, 16.7% in a school of medicine, 4.8% in a college of graduate and/or professional studies, 4.3% in a college of arts and sciences, 2.7% in a science department, and 3.2% in some other administrative housing.

FIGURE 1. GEOGRAPHIC DISTRIBUTION OF PA PROGRAMS BY U.S. CENSUS BUREAU REGIONS



Note: The U.S. Census Bureau does not consider the U.S. Virgin Islands, Puerto Rico, and other U.S. territories in their geographic divisions.

At the time of the 2014 Program Survey administration in June 2014, PAEA represented 186 member programs. **Figure 1** shows the geographic location of PA programs as determined by their U.S. Census Bureau Regions.

U.S. Census Bureau Regions

Region 1. Northeast: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont, New Jersey, New York, and Pennsylvania

Region 2. Midwest: Indiana, Illinois, Michigan, Ohio, Wisconsin, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota

Region 3. South: Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia, Alabama, Kentucky, Mississippi, Tennessee, Arkansas, Louisiana, Oklahoma, and Texas

Region 4. West: Arizona, Colorado, Idaho, New Mexico, Montana, Utah, Nevada, Wyoming, Alaska, California, Hawaii, Oregon, and Washington Ten programs (5.4%) operate satellite campuses that are accredited through their sponsoring institutions; however, none of the programs' satellite campuses have separate admissions processes.

Eighty percent of programs measure academic terms in semesters, 9.2% in quarters, 8.2% in trimesters, and 2.7% in some other length of time. Among programs that measure their academic terms in semesters, the average total number of credits required for completion was 104.2 (SD = 21.23, Mdn = 104.0).





Figure 2 demonstrates the rapid growth of the master's degree as the highest degree awarded since 2000. Of the 186 programs, only 3.8% reported a change in credentials from the previous academic year (2012-2013).

Note: Missing data were entered by PAEA after contacting programs for the information in order to achieve a 100% response rate.

TABLE 1. PRIMARY OR HIGHEST CREDENTIAL AWARDED BY PA PROGRAMS

Credential	%	N (P)
Master's degree	93.0	173
Baccalaureate degree	3.2	6
Certificate of completion	2.7	5
Associate's degree	1.1	2
Total	100.0	186

Table 1 shows that the majority of PA programs (93.0%) offer a master's degree as the primary or highest credential.

Note: Missing data were entered by PAEA after contacting programs for the information in order to achieve a 100% response rate.

Fifteen percent of programs (n = 28) offer additional credentials. Thirteen of these programs offer certificates of completion, seven offer bachelor's degree/master's degree accelerated programs, five offer master's degrees plus a Master of Public Health, three offer associate's degrees and master's degrees, and five offer other academic credentials.

TABLE 2. CREDENTIALS AWARDED BY PA PROGRAMS

Credential Category	%	n (P)
Baccalaureate degree		
Bachelor of Science (BS)	2.7	5
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)	0.5	1
Master's degree		
Master of Science (MS)	17.2	32
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)	54.8	102
Master of Health Science (MHS)/Master of Science in Health Science (MSHS)	5.9	11
Master of Medical Science (MMS/MMSc)/ Master of Science in Medicine (MSM)	13.4	25
Other master's degree	1.6	3
Other		
Certificate of completion	9.7	18
Associate's degree	1.1	2
Bachelor's degree/master's degree (accelerated program)	3.8	7
Master's degree plus Master of Public Health	2.7	5
Associate's degree and master's degree	1.6	3
Other	2.7	5

Note: Missing data were entered by PAEA after contacting programs or visiting their websites for the information in order to achieve a 100% response rate. Programs could choose more than one answer; therefore, the total may not equal 100%.

Table 2 demonstrates all credentials awardedby PA programs.



Figure 3 shows the number of programs enrolling their first classes in each academic year since the first PA program enrolled students in 1965. In 2013, PAEA contacted all programs to verify these data to ensure stable data are reported accurately moving forward.

FIGURE 4. CUMULATIVE TOTAL NUMBER OF PA PROGRAMS BY YEAR FIRST CLASS ENROLLED



Figure 4 displays the cumulative total number of PA programs by year first class enrolled. Both Figures 3 and 4 illustrate that there were bursts of programs that enrolled their first-year classes between 1970-1973 and 1995-2000. It appears that the profession is in the middle of another period of rapid growth, given the upward trend of programs that have enrolled their first year classes since 2009. The ARC-PA projects 77 new PA programs will receive provisional accreditation consideration by 2020.¹

¹ Accreditation Review Commission on Education for the Physician Assistant, Notes to Programs, Spring 2015.

Program Length

Program length was measured for the professional phase only; thus, calculations do not include the pre-professional phase.

The average length of didactic training was 58.5 weeks (SD = 10.75, Mdn = 56.0) and the average length of clinical training was 54.2 weeks (SD = 7.79, Mdn = 52.0). The average length of vacation was 9.6 weeks (SD = 5.97, Mdn = 8.0).

Fifty-two percent of programs offered clinical experiences during didactic training. The average length of these experiences was 15.1 days (SD = 15.52, Mdn = 10.0, range = 1-65). As more programs are incorporating clinical training into their didactic training, it becomes increasingly challenging to capture the exact length of time for each training phase of education.



FIGURE 5. TOTAL PA PROGRAM LENGTH (MONTHS)







Figure 6 shows that the most common start month for responding programs was August (30.6%, n = 57). Eighty-four percent of responding programs started between May and September. The most common end months for responding programs were May, August, and December.

Pre-Professional Phase

Twenty-nine programs (15.6%) had a pre-professional phase. The average length of the pre-professional phase for these programs was 5.8 semesters (SD = 1.48, range = 4-9). Of the programs with a pre-professional phase, 93.1% admitted students from both the pre-professional track and through direct admission to the professional phase, and 6.9% only admitted students from the pre-professional phase track. On average, programs that admitted students into both the pre-professional track and directly into the professional phase admitted 24.2 students (SD = 15.80, range = 0-56) through the pre-professional phase and 27.3 students (SD = 23.62, range = 0-99) through direct admission. On average, programs expect 63.7% of pre-PA students (SD = 25.69%, range = 6%-95%) to enter the professional phase.

TABLE 3. PROGRAMS' MODELS FOR THE PRE-PROFESSIONAL PHASE

Pre-Professional Phase Model	%	n (P)	
3+2	41.4	12	
2+3	20.7	6	
3+3	13.8	4	
4+2	10.3	3	
2+2	3.4	1	
Other	10.3	3	
Total	100.0	29	

Table 3 displays programs' models for the pre-
professional phase.

SECTION 2. FINANCIAL INFORMATION

For this section, programs were asked to supply their financial information for the most recent fiscal year. Other sections of this report requested information for the 2013-2014 academic year.

Program Budget

One hundred and eighty-five programs reported the start and end months of their fiscal year. The most frequently reported fiscal years include July 1-June 30 (77.3%), June 1-May 31 (8.1%), and September 1-August 31 (7.0%). The following tables about program budget generally do not reflect indirect support (e.g., library services, IT support, and health services) provided by the institution to the PA programs and their students.

TABLE 4. SOURCES OF FINANCIAL SUPPORT FOR PA PROGRAMS

Budget Sources	M (\$)	SD (\$)	P10 (\$)	P25 (\$)	P50 (Mdn) (\$)	P75 (\$)	P90 (\$)	n (P)	% Reporting
Overall budget	2,221,751	2,426,852	664,840	1,009,223	1,500,169	2,535,116	4,147,783	178	95.7
Sponsoring institution	1,254,855	1,001,045	195,653	727,100	1,010,798	1,541,311	2,403,551	150	80.6
Tuition and fees	2,195,412	2,621,284	72,088	511,789	1,226,016	3,111,225	4,948,708	86	46.2
Federal grant/contract	234,461	142,139	103,482	130,000	202,693	281,381	455,266	36	19.4
State grant/contract	246,935	188,681	10,149	141,988	219,989	384,224	567,334	16	8.6
Private foundation	102,544	161,933	3,010	3,934	30,973	97,250	473,000	22	11.8
Giving/Endowment	76,523	152,371	196	1,000	5,200	100,292	435,185	11	5.9
Other	143,457	189,412	17,773	24,612	60,834	238,150	446,821	20	10.8

Note: Total n (P) responding = 178. Programs that claimed AHEC support and industry donation totaled to fewer than five cases and were not reported.

Table 4 summarizes sources of financial support for responding PA programs. For this reason, mean percentages of budget items from all sources do not add up to 100%. One hundred and seventy-eight programs provided budget information. Most programs (80.6%) reported having received direct support from their sponsoring institutions.

TABLE 5. DIFFERENCES IN PUBLIC AND PRIVATE PROGRAMS' BUDGETS BY CLASS SIZE
--

Public	M (\$)	SD (\$)	Mdn (\$)	n (P)
Budget from Sponsoring Institution				
0-25	720,389	434,208	659,789	12
26-50	889,489	521,103	887,702	28
51-75	1,023,925	527,212	1,267,502	7
Total	866,495	495,038	879,503	48
Total Budget				
0-25	1,112,197	548,951	1,092,951	14
26-50	1,414,321	857,886	1,191,142	33
51-75	1,859,522	1,124,190	1,465,881	8
Total	1,515,295	1,156,318	1,267,885	57
Private				
Budget from Sponsoring Institution				
0-25	858,465	554,347	910,000	17
26-50	1,097,618	638,428	986,771	46
51-75	1,735,225	876,621	1,547,627	24
76-100	2,964,371	1,984,640	2,224,292	8
Total	1,405,176	1,058,039	1,114,969	100
Total Budget				
0-25	2,235,655	4,031,012	1,059,768	21
26-50	1,695,117	1,070,212	1,418,603	56
51-75	3,290,343	2,034,440	2,948,660	27
76-100	6,038,721	4,756,339	3,868,340	9
Total	2,501,152	2,701,742	1,636,775	118

Table 5 shows the differences in public and
private programs' budgets by class size.Median budget from sponsoring institution
and median total budget increased as class
size increased for responding PA programs
at public and private institutions. The median
budget from private sponsoring institutions was
higher than the median budget from public
institutions, regardless of class size.

Note: Public institutions with fewer than five cases were not reported for class sizes between 76-100 and 101-125. Private institutions with fewer than five cases were not reported for class sizes between 101-125. These programs were included in the overall averages for public and private.

TABLE 6. INSTITUTIONAL BUDGET DIFFERENCES

	M (\$)	SD (\$)	Mdn (\$)	n (P)
Academic Health Center Institutions				
Budget from sponsoring institution	1,185,601	1,015,428	987,395	48
Total budget	2,356,772	1,988,984	1,713,480	59
Non-Academic Health Center Institutions				
Budget from sponsoring institution	1,287,445	997,580	1,073,632	102
Total budget	2,154,807	2,622,266	1,384,771	119

Table 6 shows the budgetary differences between PA programs from academic health centers (AHCs) and non-AHCs. On average, responding PA programs housed in non-AHC institutions had higher average budgets from their sponsoring institutions than those housed in AHC institutions. However, average total budget was higher for responding PA programs housed in AHC institutions.

TABLE 7. DIFFERENCES IN BUDGET BY ADMINISTRATIVE HOUSING

Administrative Housing	M (\$)	SD (\$)	Mdn (\$)	n (P)
School of Medicine				
Budget from sponsoring institution	1,128,639	879,200	986,927	23
Total budget	2,574,637	1,797,687	2,076,802	30
School of Allied Health/Health Professions				
Budget from sponsoring institution	1,371,848	1,196,440	1,005,694	76
Total budget	2,308,841	2,885,408	1,500,000	91
Science Department				
Budget from sponsoring institution	494,062	504,426	265,000	5
Total budget	592,193	496,348	646,378	5
College of Arts and Sciences				
Budget from sponsoring institution	1,040,830	681,689	981,272	7
Total budget	1,840,580	1,046,173	1,450,418	7
College of Graduate and Professional Studies				
Budget from sponsoring institution	1,045,955	535,653	1,233,103	8
Total budget	2,150,835	1,942,663	1,610,379	9
Other				
Budget from sponsoring institution	1,066,374	300,136	985,680	5
Total budget	1,284,130	406,428	1,192,880	6

Table 7 displays differences in budget by
administrative housing. Responding PA
programs housed in schools of allied health/
health professions had the highest average
budget from their sponsoring institution. PA
programs housed in schools of medicine had
the highest average total budget.

FIGURE 7. AVERAGE FINANCIAL SUPPORT RECEIVED BY PA PROGRAMS, 1985-2014



Figure 7 shows the trends in total financial support received by responding PA programs, support from the sponsoring institution, and support from federal grants or contracts. The average total budget increased by 10.7% from 2012-2013. The average support from sponsoring institutions increased by 0.1%. The average support from federal grants or contracts increased by 17.4% from 2012-2013. Eighty-one percent (80.6%) of responding programs reported receiving financial support from their sponsoring institution, and 19.4% reported receiving federal grants or contracts.

Note: These data were not adjusted for inflation.

Program Expenses

Programs were asked to estimate the percentages of their total expenses accounted for by various items, such as employee salaries, didactic instruction, supervised clinical practice, and office expenses.

TABLE 8. PA PROGRAM EXPENSES

Expense Category	M (\$)	SD (\$)	Mdn (\$)	n (P)	% Reporting
Faculty salaries	717,701	345,401	646,000	175	94.1
Faculty development	19,323	15,122	15,646	173	93.0
Staff salaries	162,428	156,001	110,960	170	91.4
Office supplies	30,078	70,867	10,000	163	87.6
Laboratory supplies	18,427	22,454	10,000	149	80.1
Payment for didactic instruction not included in faculty salaries	76,545	159,541	38,416	146	78.5
Standardized patients	11,500	12,203	8,000	107	57.5
Simulation activities	18,791	23,496	11,259	57	30.6
Supervised clinical practice (sites and/or preceptors)	159,053	180,254	99,500	41	22.0
Student housing and travel to remote clinical sites	37,912	61,360	16,300	39	21.0

Table 8 presents the mean, standard deviation, and median values for various PA program expenses. Most programs paid for faculty salaries (94.1%), faculty development (93.0%), staff salaries (91.4%), office supplies (87.6%), and laboratory supplies (80.1%). Fewer programs paid for simulation activities (30.6%), supervised clinical practice (22.0%), and student housing and travel to remote clinical sites (21.0%). Percentage totals may not add up to 100%, as only major expenses were included. Missing values and zeroes were not included in mean and median calculations.

Payment for Clinical Sites

Of the programs that provided some form of payment for training at clinical sites (n = 51), 27.1% paid for all training and 72.9% paid for a percentage of total sites. Based on 47 programs reporting, the average cost per student per week for clinical sites was \$210 (SD = \$254, range = \$42-\$1,500).

The average amount of out-of-pocket expenses the typical student paid for housing at remote clinical training sites for the entire 2013-2014 academic year was \$3,787 (SD =\$5,501, range = \$1-\$36,000, n = 66) up from \$1,519 (SD =\$2,691, range = \$0-\$10,000, n = 73) in 2012-2013.

TABLE 9. CLINICAL SITES PAYMENT PRACTICES

Payment to Sites/Preceptors	%	n (P)
No payments to sites or preceptors	72.1	132
Payment to some sites/preceptors, but not all	20.2	37
Payment to all sites and preceptors	3.3	6
Payment only to the site	2.2	4
Payment only to the preceptor	2.2	4
Total	100.0	183

Table 9 displays the proportion of programs that pay for clinical sites and how the payments are distributed. Seventy-two percent of programs did not provide any payment to clinical sites or preceptors. Twenty percent (20.2%) of programs paid some, but not all, sites and/or preceptors. Further examination is needed to determine what factors lead these programs to pay certain sites and/or preceptors.

Tuition and Fees, Incidental Costs, and Student Fees

Programs were asked to provide the estimated current total tuition, student fees, and incidental costs that each student will incur for the entire length of the PA program (professional phase only). PA programs reported an average total resident tuition of \$64,961, up 5.6% from last year. The historical average increase is 8.2% (1986-2014). The average total non-resident tuition was \$75,964, up 5.2% from last year. The average increase in non-resident tuition over the last five years was 3.5%, while resident tuition rose 4.1%. Of particular interest was the difference between public and private institution tuition and fees.

TABLE 10. TUITION, STUDENT FEES, AND INCIDENTAL COSTS FOR PUBLIC AND PRIVATE PA PROGRAMS

Tuition and Fees	M (\$)	SD (\$)	Mdn (\$)	n (P)
Public				
Total resident tuition	41,561	20,364	35,282	58
Total non-resident tuition	72,973	27,977	69,752	58
Incidental costs	7,270	12,421	3,805	49
Private				
Total resident tuition	77,639	18,472	76,110	107
Total non-resident tuition	77,330	18,583	76,635	107
Incidental costs	9,718	16,787	3,989	105

Table 10 indicates that the average total resident tuition and non-resident tuition were higher for responding PA programs from private institutions than those from public institutions.

"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, and housing). Incidental costs include textbooks, diagnostic equipment, required technology/ software, and other academic expenses. The average total for incidental costs per student for the entire professional phase was \$8,872, up from the previous year's \$5,106. The average total for incidental costs for responding PA programs from public institutions was slightly lower than private institutions.

TABLE 11. DIFFERENCE IN AVERAGE COST OF STUDYING AT A PA PROGRAM, 2013-2014

		Public			Private	
Academic Year	Resident Tuition (\$)	Non- Resident Tuition (\$)	Incidentals (\$)	Resident Tuition (\$)	Non- Resident Tuition (\$)	Incidentals (\$)
2012-2013	38,794	68,311	5,937	74,426	74,523	4,067
2013-2014	41,561	72,973	7,270	77,639	77,330	9,718
% Change	+7.1	+6.8	+22.5	+4.3	+3.8	+139.0

Table 11 displays the difference in the cost of studying at a PA program between 2012-2013 and 2013-2014. There was a 4% to 7% increase in the average total resident and non-resident tuition for public and private institutions. The average total incidental costs for both public and private institutions increased by 23% and 139%, respectively. There was an abnormal decrease in tuition and incidental costs last year; thus, the increases this year are not considered to be dramatic. Responses to the tuition and fees questions vary every year and can become inflated or deflated depending on the response rate and interpretation of the question.



Figure 8 shows that the average total tuition for PA students has steadily increased over time. Between 1985 and 2014, average total resident tuition increased from \$6,378 to \$64,961, while average total non-resident tuition increased from \$8,986 to \$75,964.

Note: These numbers were not adjusted for inflation.

TABLE 12. STUDENT FEES COLLECTED BY THE INSTITUTION/PROGRAM

Student Fees	M (\$)	SD (\$)	Mdn (\$)	n (P)
Student health services	1,552	1,936	630	33
Clinical fees	1,431	1,905	1,000	23
Student services	1,100	1,410	525	47
Computer/IT	1,030	936	647	54
Laboratory fees	805	747	500	41
Parking	296	296	195	40
BLS/ACLS	218	93	218	46
Background check	102	86	80	56
Drug testing	75	92	45	27
Other fees	3,087	4,446	780	19

Table 12 shows a breakdown of student fees. Forty-eight percent (n = 89) of programs were able to report their student fees by type. The most expensive student fees collected by programs were student health services (M = \$1,552, SD = \$1,936), clinical fees (M = \$1,431, SD = \$1,905), and student services (M = \$1,100, SD = \$1,410). Forty-five percent (n = 83) of programs could not break down their student fees. Their average total student fees were \$5,243 (SD = \$8,976, Mdn = \$3,034).

Scholarships

An average of 67,914 (n = 87, SD = 131,436) in scholarship funds were awarded by, or passed through, the institution or the program for the class that graduated in 2013, excluding federal loans and scholarships (e.g., National Health Service Corps, Expansion of Physician Assistant Training grants).

SECTION 3. PROGRAM PERSONNEL

Starting in 2014, the employee profile was removed from the Program Survey and included in the PA Program Faculty and Directors Survey. The *2014 Faculty & Directors Research Report* was published in March 2015 and includes additional details about faculty and directors.

Overall, 181 programs reported 1,843 program faculty, including medical directors. Of those, 1,467 were identified as core faculty and 376 were identified as adjunct faculty.

TABLE 13. PROGRAM FTE FOR TOTAL CORE FACULTY

					P50				
Core Faculty	М	SD	P10	P25	(Mdn)	P75	P90	n (P)	n (F)
Didactic	3.4	3.51	0.0	1.0	3.0	4.5	7.5	183	613
Clinical	0.9	1.17	0.0	0.0	1.0	1.2	2.8	181	170
Combined	2.1	2.96	0.0	0.0	1.0	3.0	5.8	185	382
Administration	1.4	1.38	0.1	1.0	1.0	1.7	3.0	185	263
Research	0.2	0.45	0.0	0.0	0.0	0.2	1.0	183	39

Note: Combined core faculty are faculty with combined didactic and clinical duties.

TABLE 14. PERCENTAGE OF DIDACTIC CURRICULUM TAUGHT BY CORE FACULTY

Delivery Method	м	SD	P10	P25	P50 (Mdn)	P75	P90	n (P)
Taught directly by core faculty	66.0	18.76	40.0	50.0	69.5	80.0	90.0	186
Coordinated by core faculty but taught by others	27.7	18.24	5.0	14.8	25.0	40.0	50.0	186
Taught by external personnel with minimal input from core faculty	6.4	11.33	0.0	0.0	0.0	10.0	19.8	184

Table 13 shows that, on average, responding PA programs employed 3.4 core didactic faculty members (SD = 3.51), 0.9 core clinical faculty members (SD = 1.17), 2.1 core faculty with combined didactic and clinical duties (SD = 2.96), 1.4 core administration faculty members (SD = 1.38), and 0.2 core research faculty members (SD = 0.45).

Table 14 shows that program core faculty taught 66.0% of the didactic phase curriculum. Twenty-eight percent of the curriculum was coordinated by core faculty but taught by others, and 6.4% was taught by external personnel with minimal input from core faculty.

TABLE 15. AVERAGE CREDIT HOURS PER TERM OF THE AVERAGE FULL-TIME FACULTY MEMBER

Average Credit Hours per Term	М	SD	Mdn	n (P)
Didactic courses	8.0	10.80	6.0	181
Clinical courses	5.2	8.94	2.0	181
Lab	1.7	2.80	1.0	183
Thesis	0.7	1.83	0.0	183
Other	0.3	1.31	0.0	183

Forty percent of programs reported that they had an annual faculty load requirement for teaching at their program. **Table 15** displays the average number of credit hours of the average full-time (0.5 FTE or higher) faculty member's load per academic term. The average full-time faculty member teaches an average of 8.0 credit hours of didactic courses (SD = 10.80), 5.2 credit hours of clinical courses (SD = 8.94), 1.7 credit hours of lab (SD = 2.80), and 0.7 credit hours of thesis instruction (SD = 1.83) per academic term.

TABLE 16. AVERAGE FACULTY AND STAFF FTE BY CAPACITY AND FILLED AND VACANT POSITIONS

Employee	м	SD	n (P)	n (FTE)
Capacity				
Faculty	6.9	4.08	185	1,283
Staff	3.3	2.53	184	607
Program director	1.0	0.06	182	180
Medical director	0.7	0.49	181	118
Filled				
Faculty	6.5	3.97	177	1,146
Staff	3.1	2.49	173	540
Program director	1.0	0.10	169	166
Medical director	0.6	0.48	169	107
Vacant				
Faculty	0.7	0.83	143	101
Staff	0.3	0.65	127	33
Program director	0.1	0.25	121	8
Medical director	0.0	0.17	118	4

TABLE 17. AVERAGE NUMBER OF FACULTY AND STAFF HIRED IN 2013-2014

Faculty	М	SD	Mdn	n (P)
New position	0.69	0.95	0.00	148
Replacing position	0.95	0.95	1.00	149
Staff				
New position	0.31	0.58	0.00	147
Replacing position	0.40	0.63	0.00	147

Table 16 shows that responding programs reported an average capacity of 6.9 FTE for faculty and 3.3 FTE for staff.

Eighty-one percent of programs hired new faculty in the 2013-2014 academic year. **Table 17** shows that of these new hires, an average of 0.69 (SD = 0.95) were new faculty positions, and 0.95 (SD = 0.95) replaced existing faculty positions.

FIGURE 9. BARRIERS PA PROGRAMS FACED FOR HIRING NEW FACULTY



Note: This scale was originally an 8-point scale, with 1 as the most significant barrier and 8 as the least significant barrier. Scale points were collapsed as follows: 1-3 (most significant barrier), 4-5 (moderate barrier), and 6-8 (least significant barrier).

Student to Faculty Ratio

Institutions calculate student-to-faculty ratio (SFR) differently. The ratio is presented here using the total core faculty FTE. The SFR was calculated by dividing the total number of enrollees (19,071) by the total number of core faculty FTE (1,467), which yielded a SFR of 13.0 for the 2013-2014 academic year.

Figure 9 displays the challenges that programs faced in hiring new faculty. Lack of qualified candidates, salary, and candidates' lack of teaching experience were the most significant barriers programs faced in hiring new faculty.

SECTION 4. STUDENTS

Enrollment and Capacity

Twenty percent (n = 37) of programs were provisionally accredited at the time of the survey administration. Of these, 42% of the programs' inaugural classes were enrolled in the first year, 33.3% enrolled in the second year, 19.4% graduated, and 5.6% did not yet have students enrolled.

FIGURE 10. REASONS FOR UNMET FIRST-YEAR CAPACITY



Note: Programs could choose more than one answer; therefore, the total may not equal 100%.

TABLE 18. PA PROGRAM ENROLLMENT AND CAPACITY

					P50				
Capacity	М	SD	P10	P25	(Mdn)	P75	P90	n (P)	n (S)
First year	47.5	38.85	24.0	30.0	40.0	55.0	75.0	184	8,740
Second year	45.8	39.45	20.0	30.0	40.0	55.0	75.0	183	8,374
Third year	44.6	16.27	30.0	35.0	40.0	50.0	67.0	95	4,235
All years	116.0	84.19	42.0	72.0	105.5	148.8	193.0	184	21,349
Enrollment									
First year	44.5	34.46	20.0	29.0	39.0	55.0	75.0	183	8,147
Second year	42.8	24.32	19.1	29.0	40.0	56.0	73.9	170	7,274
Third year	42.4	16.31	25.8	31.0	40.0	53.0	66.0	86	3,650
All years	104.2	67.78	27.0	56.0	97.0	137.0	179.4	183	19,071

Table 18 displays the average enrollment and capacity for PA programs. For the firstyear class, the average enrollment was 44.5 students, slightly lower than the average capacity of 47.5. The average enrollment for the second-year class was 42.8, which was slightly lower than the average capacity of 45.8. For the third-year class, the average enrollment was 42.4, which was lower than the average capacity of 44.6. Third-year enrollment may vary for programs with a duration of 25-35 months because the survey administration may not coincide with the presence of year-three cohorts.

Eighty-two percent of programs filled their first-year capacity. **Figure 10** shows that for the 33 programs that did not fill their first-year capacity, the top three reasons for vacancies were voluntary withdrawal (36%), students dismissed (30%), and limited clinical training sites (15%).

FIGURE 11. AVERAGE TOTAL PROGRAM ENROLLMENT AND CAPACITY



Trends in total capacity and enrollment are shown in **Figure 11**. The average enrollment and capacity have remained constant over the past four years with a slight decrease this year.

Note: There was a decrease in the total maximum capacity and current enrollment this year. This is potentially due to new programs without classes.

FIGURE 12. TOTAL FIRST-YEAR CLASS ENROLLMENT AT PA PROGRAMS, 1985-2014



Figure 12 shows a total of 8,147 new students reported for the 183 responding programs. Total enrollment has increased significantly over the past seven years, stimulated by increases in the number of programs and increased capacity of existing programs.





Figure 13 displays the average first-year class enrollment at PA programs since 1984. The average first-year class enrollment has stayed somewhat stable over the last six years. There was a slight decrease in the average first-year class enrollment at PA programs in 2013-2014, which was due to zeroes being included. Programs that reported zeroes had not yet enrolled their first cohort.

TABLE 19. PA PROGRAM ENROLLMENT BY GENDER

Male	%	n (P)	n (S)
First year	29.7	183	2,496
Second year	26.9	170	1,983
Third year	25.6	157	929
Total	27.9	183	5,408
Female			
First year	70.3	183	5,898
Second year	73.1	170	5,396
Third year	74.4	157	2,702
Total	72.1	183	13,996
Total			
First year	100.0	183	8,394
Second year	100.0	170	7,379
Third year	100.0	157	3,631
Total	100.0	183	19,404

PA program enrollment by gender is shown in **Table 19**. Distribution of male and female enrollees was nearly identical across all three class years. Greater than 70% of all PA students are female. The gender distribution of first-year students remains stable after a 20-year trend of gradually increasing the proportion of females.

Note: Some programs did not report students' gender; thus, the overall n is lower than expected.

		%	n (P)	n (S)
First-Year	Male			
First-Year Class	Hispanic	9.4	182	162
	Non-Hispanic	86.9	182	1,497
	Unknown	3.7	180	64
	Female			
	Hispanic	7.8	183	317
	Non-Hispanic	89.3	182	3,631
	Unknown	2.9	181	116
	Unknown gender			
	Hispanic	2.2	180	8
	Non-Hispanic	41.5	181	151
	Unknown	56.3	180	205
Second-Year	Male			
Class	Hispanic	7.5	170	113
	Non-Hispanic	89.0	168	1,339
	Unknown	3.5	169	52
	Female			
	Hispanic	7.2	170	270
	Non-Hispanic	90.8	169	3,417
	Unknown	2.0	169	77
	Unknown gender			
	Hispanic	1.8	181	7
	Non-Hispanic	33.3	169	131
	Unknown	64.9	168	255
Third-Year	Male			
Class	Hispanic	10.3	158	70
	Non-Hispanic	87.5	158	596
	Unknown	2.2	158	15
	Female			
	Hispanic	7.5	158	141
	Non-Hispanic	89.9	158	1,691
	Unknown	2.6	158	49
	Unknown gender			
	Hispanic	6.4	158	9
	Non-Hispanic	2.1	158	3
	Unknown	91.4	158	128

Table 20 displays PA program enrollment by gender and ethnicity. For all class years, there was a higher proportion of Hispanic males than Hispanic females. Overall, 7.6% of all enrollees are Hispanic, up from 5.5% in 2012-2013. Unfortunately, a significant number of programs did not report student ethnicity data, which makes it challenging to provide a true picture of the demographics for PA students nationwide.

TABLE 21. PA PROGRAM ENROLLMENT BY GENDER AND RACE

		%	n (P)	n (S)
First-Year	Male			
Class	White	75.5	182	1,380
	Black or African American	5.1	183	93
	Asian	7.9	183	145
	American Indian or Alaskan Native	0.5	182	9
	Native Hawaiian or Pacific Islander	0.5	182	9
	Multiracial	2.0	183	37
	Other	6.0	182	109
	Unknown	2.5	181	46
	Female			
	White	79.9	182	3,712
	Black or African American	4.8	182	221
	Asian	7.5	183	348
	American Indian or Alaskan Native	0.6	181	26
	Native Hawaiian or Pacific Islander	0.4	182	18
	Multiracial	1.7	182	77
	Other	2.7	181	124
	Unknown	2.5	182	118
	Unknown gender			
	White	44.5	181	199
	Black or African American	1.8	182	8
	Asian	5.4	182	24
	American Indian or Alaskan Native	0.0	182	0
	Native Hawaiian or Pacific Islander	0.0	182	0
	Multiracial	0.7	182	NR
	Other	0.7	181	NR
	Unknown	47.0	182	210
Second-Year	Male			
Class	White	77 3	169	1 383
	Black or African American	4 1	169	74
	Asian	7.3	169	131
	American Indian or Alaskan Native	0.8	169	1/
	Native Hawaiian or Pacific Islander	0.0	169	12
	Multiracial	1.2	167	22
	Other	5.8	168	10/
		2.8	168	50
	Female	2.0	100	50
	White	80.4	169	3 305
	Black or African Amorican	۰00.4 ۸ 7	169	3,303 10/
		4.7 2 0	160	220
	Amorican Indian or Alaskan Native	0.0	160	JZ7 17
	Nativo Hawaijan or Pacific Islandar	0.4	160	17
		0.5	107	17
		1.0	100	04
	Other	2.7	169	112
	UNKNOWN	1.ð	100	12

 Table 21 displays PA program enrollment
 by gender and race. Among first-year male students, a higher percentage reported being Black or African American, Asian, Native Hawaiian or Pacific Islander, and Multiracial compared with first-year female students. For the second-year class, there was a higher proportion of male students who reported being American Indian or Alaskan Natives and Native Hawaiian or Pacific Islander compared with female second-year students. For the third-year class, there was a higher proportion of male students who reported being White, Black or African America, and Native Hawaiian or Pacific Islander compared with female thirdyear students. Students identified by "other" race or "unknown" could account for some of these differences in enrollment by gender and race. A significant number of programs that did not report student race data make it challenging to provide a true picture of the demographics for PA students nationwide. For all years combined, there was little difference between the proportions of each race by gender.

TABLE 21. PA PROGRAM ENROLLMENT BY GENDER AND RACE, CONTINUED

		%	n (P)	n (S)
Second-Year	Unknown gender	70	п (F <i>)</i>	11 (3)
Class	White	38.2	169	176
	Black or African American	2.8	169	13
	Asian	2.2	169	10
	American Indian or Alaskan Native	0.7	169	NR
	Native Hawaiian or Pacific Islander	0.0	169	0
	Multiracial	2.4	169	11
	Other	0.2	168	NR
	Unknown	53.6	168	247
Third-Year	Male			
Class	White	83.0	158	631
	Black or African American	5.3	157	40
	Asian	6.3	158	48
	American Indian or Alaskan Native	0.3	158	NR
	Native Hawaiian or Pacific Islander	0.3	158	NR
	Multiracial	1.1	158	8
	Other	1.7	158	13
	Unknown	2.1	158	16
	Female			
	White	80.1	158	1.603
	Black or African American	4.9	158	98
	Asian	7.6	158	153
	American Indian or Alaskan Native	0.5	158	10
	Native Hawaijan or Pacific Islander	0.2	158	.5
	Multiracial	1.7	158	35
	Other	2.4	158	48
	Unknown	2.4	158	49
	Unknown gender		100	.,
	White	44.6	158	75
	Black or African American	0.0	158	0
	Asian	3.0	158	5
	American Indian or Alaskan Native	0.0	158	0
	Native Hawaijan or Pacific Islander	0.0	158	0
	Multiracial	1.2	158	NR
	Other	0.0	158	0
	Unknown	51.2	158	86
All Years	Male			
	White	77.5	182	3,394
	Black or African American	4.7	183	207
	Asian	7.4	183	324
	American Indian or Alaskan Native	0.6	182	25
	Native Hawaiian or Pacific Islander	0.5	182	23
	Multiracial	1.5	183	67
	Other	5.2	182	226
	Unknown	2.6	181	112
		-	-	

TABLE 21. PA PROGRAM ENROLLMENT BY GENDER AND RACE, CONTINUED

		0/		m (S)
All Years	Female	70	n (r)	n (S)
	White	80.1	182	8,620
	Black or African American	4.8	182	513
	Asian	7.7	183	830
	American Indian or Alaskan Native	0.5	181	53
	Native Hawaiian or Pacific Islander	0.4	182	42
	Multiracial	1.6	182	176
	Other	2.6	181	284
	Unknown	2.2	182	239
	Unknown gender			
	White	41.8	181	450
	Black or African American	2.0	182	21
	Asian	3.6	182	39
	American Indian or Alaskan Native	0.3	182	NR
	Native Hawaiian or Pacific Islander	0.0	182	0
	Multiracial	1.5	182	16
	Other	0.4	181	NR
	Unknown	50.5	182	543
	Total			
	White	76.9	182	12,464
	Black or African American	4.6	183	741
	Asian	7.4	183	1,193
	American Indian or Alaskan Native	0.5	182	81
	Native Hawaiian or Pacific Islander	0.4	182	65
	Multiracial	1.6	183	259
	Other	3.2	182	514
	Unknown	5.5	182	894

TABLE 22. FIRST-YEAR CLASS: AGE

Age	М	SD	Mdn	n (P)
Age of first-year PA student	26.1	2.51	26.0	170
Age of youngest first-year PA student	21.4	1.23	21.0	168
Age of oldest first-year PA student	44.1	7.57	44.0	168

TABLE 23. FIRST-YEAR CLASS: GRADE POINT AVERAGES

GPA Category	М	SD	Mdn	n (P)
Overall undergraduate	3.52	0.14	3.52	176
Undergraduate science	3.47	0.16	3.49	163
CASPA biology, chemistry, physics (BCP)	3.42	0.17	3.45	84
Undergraduate non-science	3.54	0.20	3.59	88

Table 22 shows the average age of matriculants for responding programs. The average age of first-year students was 26.1 years (SD = 2.51). The average age of the youngest first-year student was 21.4 years (SD = 1.23), and the average age of the oldest first-year student was 44.1 years (SD = 7.57).

Table 23 shows the average grade point averages (GPAs) of matriculants for responding programs. The average undergraduate nonscience GPA (M = 3.54, SD = 0.20) was higher than the average overall undergraduate GPA (M = 3.52, SD = 0.14) and average undergraduate science GPA (M = 3.47, SD = 0.16). The average CASPA biology, chemistry, physics (BCP) GPA was 3.42 (SD = 0.17) for responding programs.

TABLE 24. REQUIRED EXAMINATIONS FOR ENTRANCE INTO PA PROGRAMS

Test	%	n (P)
GRE	75.8	91
GRE or MCAT	12.5	15
SAT	7.5	9
ACT	3.3	4
MCAT	2.5	3
Other	5.8	7
Total	-	129

Note: Programs could choose more than one answer; therefore, the total may not equal 100%.

TABLE 25. FIRST-YEAR CLASS: GRE SCORES

GRE Scores	М	SD	Mdn	n (P)
Verbal reasoning	152.2	5.32	153.0	59
Quantitative reasoning	152.0	3.68	152.0	55
Analytical writing	3.9	0.28	4.0	50

Note: The GRE score categories included in the survey instrument did not match the true GRE score categories; thus, they were edited in this report. Any outliers due to a misinterpretation of the question were excluded.

TABLE 26. AVERAGE HEALTH CARE EXPERIENCE HOURS OF MATRICULATING STUDENTS

Health Care Experience	М	SD	Mdn	n (P)
Patient contact experience	3,100	3,006	2,325	89
Other health care experience	1,014	943	713	30
Other work experience	2,001	1,771	1,500	21
Community service	425	480	270	32
Shadowing	144	204	88	45

One-hundred and twenty programs required examinations for entrance, while 59 programs did not require any tests for entrance into their program. **Table 24** shows that almost 76% of these programs required the Graduate Record Exam (GRE) as a required test for entrance, followed by either the GRE or Medical College Admission Test (MCAT; 12.5%), and the SAT (7.5%).

Table 25 shows the average Graduate Record Exam (GRE) scores of matriculants for responding programs. The average verbal reasoning score was 152.2 (SD = 5.32), and the average quantitative reasoning score was 152.0 (SD = 3.68). The average analytical writing score was 3.9 (SD = 0.28).

Table 26 shows the average health care experience (HCE) hours of matriculants for responding programs. Fifty-three percent of programs (n = 95) collect information on the average number of hours of HCE or work/ volunteer experience.

Matriculating students accrued the most hours in patient contact experience (M = 3,100, SD = 3,006), followed by other work experience (M = 2,001, SD = 1,771) and other health care experience (M = 1,014, SD = 943).

The 2014 Cohort

Programs were asked to provide information for their 2014 cohort. The cohort is defined as the group of students who entered into a program expecting to graduate in 2014. For most programs, this group started in 2012.

TABLE 27. 2014 COHORT: ENROLLMENT AT MATRICULATION

2014 Cohort	м	SD	Mdn	% of class	n (P)	n (S)
New students	44.9	25.87	42.0	97.3	164	7,355
Decelerated students from previous class	1.0	2.20	0.0	2.2	163	169
Delayed/Deferred admission from previous year	0.2	0.52	0.0	0.4	163	32
Total	45.8	27.06	43.0	100.0	164	7,556

Table 27 shows that at matriculation, the 2014 cohort per program had an average of 44.9 new students (SD = 25.87), 1.0 decelerated students from a previous class (SD = 2.20), and 0.2 students who delayed or deferred admission from the previous year (SD = 0.52).

FIGURE 14. ESTIMATED PA PROGRAM GRADUATES, 1985-2014



There were approximately 7,556 graduates from 164 responding programs in 2014. As done in previous years, the estimated national output of PAs was calculated by multiplying the average graduate class size (45.8 students) by the number of programs that expected graduates that year (165) for an estimated 7,556 graduates. This is the first year that the projection matches the data that programs reported, due to a high response rate. **Figure 14** shows the average number of graduates per program and the estimated total of PA program graduates since 1985.

TABLE 28. 2014 COHORT'S GRADUATION, DECELERATION, AND WITHDRAWAL RATES BY GENDER

Males	%	М	SD	Mdn	n (P)	n (S)
Graduated	90.9	11.4	10.58	10.0	165	1,880
Decelerated	5.0	0.6	3.33	0.0	162	103
Withdrawn/Dismissed	4.2	0.5	1.63	0.0	162	86
Total	100.0	12.5	13.04	11.0	165	2,069
Females						
Graduated	95.4	30.8	16.81	30.0	165	5,078
Decelerated	2.2	0.7	1.12	0.0	165	116
Withdrawn/Dismissed	2.5	0.8	1.39	0.0	163	131
Total	100.0	32.3	17.35	31.0	165	5,325
Unknown gender						
Graduated	NR	NR	NR	NR	163	NR
Decelerated	0.0	0.0	0.00	0.0	164	0
Withdrawn/Dismissed	NR	NR	NR	NR	164	NR
Total	100.0	0.0	0.32	0.0	164	5
Total						
Graduated	94.1	42.2	22.50	40.0	165	6,962
Decelerated	3.0	1.3	3.53	0.0	165	219
Withdrawn/Dismissed	2.9	1.3	2.66	1.0	165	218
Total	100.0	44.8	24.33	42.0	165	7,399

Table 28 shows that the average percentage of male students who withdrew or decelerated (4.2%, 5.0%) was higher than female students (2.5%, 2.2%). The average graduation rate for PA students was 94.1%, which was higher than last year (93.5%). Female PA students had a higher graduation rate (95.4%) than male PA students (90.9%).

TABLE 29. 2014 COHORT'S GRADUATION, DECELERATION, AND WITHDRAWAL RATES BY GENDER AND ETHNICITY

		Graduated	d b		Decelerate	d		Withdrawr	ו		Total	
	%	n (P)	n (S)	%	n (P)	n (S)	%	n (P)	n (S)	%	n (P)	n (S)
Male												
Hispanic	86.9	162	126	5.5	163	8	7.6	164	11	100.0	164	145
Non-Hispanic	92.4	164	1,208	3.1	163	40	4.6	164	60	100.0	164	1,308
Unknown	99.6	163	275	0.0	164	0	0.4	164	1	100.0	164	276
Total	93.1	164	1,609	2.8	164	48	4.2	164	72	100.0	164	1,729
Female												
Hispanic	91.4	165	277	4.6	164	14	4.0	164	12	100.0	165	303
Non-Hispanic	95.0	164	3,065	2.3	164	75	2.7	164	86	100.0	164	3,226
Unknown	97.3	164	71	0.0	164	0	2.7	164	2	100.0	164	73
Total	94.8	165	3,413	2.5	164	89	2.8	164	100	100.0	165	3,602
Unknown gender												
Hispanic	100.0	163	NR	0.0	164	0	0.0	164	0	100.0	164	NR
Non-Hispanic	0.0	164	0	0.0	164	0	100.0	164	NR	100.0	164	NR
Unknown	98.2	163	109	0.0	164	0	1.8	163	2	100.0	164	111
Total	95.7	164	110	0.0	164	0	4.3	164	5	100.0	164	115
Total												
Hispanic	90.0	165	404	4.9	164	22	5.1	164	23	100.0	165	449
Non-Hispanic	94.2	164	4,273	2.5	164	115	3.3	164	149	100.0	164	4,537
Unknown	98.9	164	455	0.0	164	0	1.1	164	5	100.0	164	460
Total	94.2	165	5,132	2.5	164	137	3.3	164	177	100.0	165	5,446

TABLE 30. 2014 COHORT'S GRADUATIO	N, DECELERATION, AND WITHDRAW	AL RATES BY GENDER AND RACE

		Graduate	ed .	C	Decelerate	ed	1	Withdraw	n		Total	
	%	n (P)	n (S)	%	n (P)	n (S)	%	n (P)	n (S)	%	n (P)	n (S)
Males												
White	92.5	164	1,263	3.2	164	43	4.3	164	59	100.0	164	1,365
Black or African American	87.5	165	84	6.3	164	6	6.3	164	6	100.0	165	96
Asian	88.4	162	114	4.7	164	6	7.0	164	9	100.0	164	129
American Indian or Alaskan Native	91.7	164	11	NR	164	NR	0.0	164	0	100.0	164	12
Native Hawaiian or Pacific Islander	90.0	164	9	0.0	164	0	NR	164	NR	100.0	164	10
Other	88.1	164	74	7.1	164	6	4.8	164	4	100.0	164	84
Unknown	94.3	164	217	1.7	164	4	3.9	164	9	100.0	164	230
Multiracial	95.7	163	22	NR	164	NR	0.0	164	0	100.0	164	23
Total	92.0	165	1,794	3.4	164	67	4.5	164	88	100.0	165	1,949
Females												
White	95.8	164	3,151	1.7	164	57	2.5	164	81	100.0	164	3,289
Black or African American	85.3	165	168	7.6	164	15	7.1	164	14	100.0	165	197
Asian	95.1	164	312	4.0	164	13	NR	164	NR	100.0	164	328
American Indian or Alaskan Native	95.2	164	20	NR	164	NR	0.0	164	0	100.0	164	21
Native Hawaiian or Pacific Islander	100.0	164	12	0.0	164	0	0.0	164	0	100.0	164	12
Other	92.0	164	115	1.6	164	2	6.4	164	8	100.0	164	125
Unknown	96.2	164	150	1.9	164	3	1.9	164	3	100.0	164	156
Multiracial	92.9	164	52	NR	164	NR	NR	164	NR	100.0	164	56
Total	95.1	165	3,980	2.2	164	94	2.6	164	110	100.0	165	4,184
Unknown												
White	99.0	164	104	NR	164	NR	0.0	164	0	100.0	164	105
Black or African American	NR	164	NR	0.0	164	0	NR	164	NR	NR	164	NR
Asian	100.0	164	5	0.0	164	0	0.0	164	0	100.0	164	5
American Indian or Alaskan Native	NR	164	NR	0.0	164	0	0.0	164	0	NR	164	NR
Native Hawaiian or Pacific Islander	0.0	164	0	0.0	164	0	0.0	164	0	100.0	164	0
Other	100.0	164	4	0.0	164	0	0.0	163	0	100.0	164	4
Unknown	100.0	163	187	0.0	164	0	0.0	164	0	100.0	164	187
Multiracial	100.0	164	11	0.0	164	0	0.0	164	0	100.0	164	11
Total	99.4	164	316	NR	164	NR	NR	164	NR	100.0	164	318
Total												
White	94.9	164	4,518	2.1	164	101	2.9	164	140	100.0	164	4,759
Black or African American	85.8	165	254	7.1	164	21	7.1	164	21	100.0	165	296
Asian	93.3	164	431	4.1	164	19	2.6	164	12	100.0	164	462
American Indian or Alaskan Native	94.4	164	34	NR	164	NR	0.0	164	0	100.0	164	36
Native Hawaiian or Pacific Islander	95.5	164	21	0.0	164	0	NR	164	NR	100.0	164	22
Other	90.6	164	193	3.8	164	8	5.6	164	12	100.0	164	213
Unknown	96.7	164	554	1.2	164	7	2.1	164	12	100.0	164	573
Multiracial	94.4	164	85	NR	164	NR	NR	164	NR	100.0	164	90
Total	94.4	165	6,090	2.5	164	162	3.1	164	199	100.0	165	6,451

Reasons	%	n (P)	n (S)
Academic dismissal	48.0	180	147
Personal reasons	30.7	181	94
Voluntary withdrawal	10.5	182	32
Medical reasons	5.9	183	18
Non-Academic dismissal	4.9	181	15
Total	100.0	183	306

Table 31 shows that for the 183 programs responding, the most common reason for student withdrawal was academic dismissal (48.0%), followed by personal reasons (30.7%), voluntary withdrawal (10.5%), medical reasons (5.9%), and non-academic dismissal (4.9%).

SECTION 5. CLINICAL TRAINING SITES

Periodically, PAEA surveys members on issues related to its strategic goals. This year's survey included follow-up questions from the Clerkship Survey, a multidisciplinary survey about clinical training administered by the Association of American Medical Colleges, American Association of Colleges of Osteopathic Medicine, American Association of Colleges of Nursing, and PAEA.

TABLE 32. WEEKS OF SUPERVISED CLINICAL PRACTICE

Clinical Sites	М	SD	Mdn	n (P)
Family medicine	7.5	4.05	6.0	182
Internal medicine	6.1	1.91	6.0	180
General surgery	5.1	1.10	5.0	184
General pediatrics	5.0	1.10	5.0	177
Emergency medicine	4.9	0.99	5.0	183
Women's health and OB/GYN	4.6	0.99	5.0	177
Behavioral/Mental health	4.5	1.09	4.0	163

TABLE 33. PROGRAMS' LEVEL OF EASE IN SECURING CLINICAL TRAINING SITES

	Clinica	Clinical Sites		ptors
	%	n (P)	%	n (P)
Family Medicine				
Very difficult or difficult	26.7	48	27.5	49
Neutral	34.4	62	34.8	62
Very easy or easy	38.9	70	37.6	67
Total	100.0	180	100.0	178
General Internal Medicine				
Very difficult or difficult	31.1	56	33.0	59
Neutral	30.0	54	30.7	55
Very easy or easy	38.9	70	36.3	65
Total	100.0	180	100.0	179
General Surgery				
Very difficult or difficult	31.8	57	31.3	56
Neutral	34.1	61	36.3	65
Very easy or easy	34.1	61	32.4	58
Total	100.0	179	100.0	179
General Pediatrics				
Very difficult or difficult	77.1	138	76.0	133
Neutral	14.0	25	14.9	26
Very easy or easy	8.9	16	9.1	16
Total	100.0	179	100.0	175
Women's Health and OB/GYN				
Very difficult or difficult	83.9	151	83.8	150
Neutral	10.0	18	10.1	18
Very easy or easy	6.1	11	6.1	11
Total	100.0	180	100.0	179

Programs were asked to enter the number of required weeks students must complete for each distinct specialty area of supervised clinical practice. **Table 32** shows that the specialty areas of supervised clinical practice in which students had the most weeks, on average, included family medicine (M = 7.5, SD = 4.05), internal medicine (M = 6.1, SD = 1.91), and general surgery (M = 5.1, SD = 1.10).

Table 33 shows that programs had the most difficulty securing clinical training sites in women's health and OB/GYN (83.9%), general pediatrics (77.1%), and behavioral/mental health (49.7%). Programs had the most difficulty securing preceptors in women's health and OB/ GYN (83.8%), general pediatrics (76.0%), and behavioral/mental health (51.1%).

TABLE 33. PROGRAMS' LEVEL OF EASE IN SECURING CLINICAL TRAINING SITES, CONTINUED

	Clinica	l Sites	Prece	ptors
	%	n (P)	%	n (P)
Behavioral/Mental Health				
Very difficult or difficult	49.7	89	51.1	91
Neutral	30.7	55	30.3	54
Very easy or easy	19.6	35	18.5	33
Total	100.0	179	100.0	178
Emergency Medicine				
Very difficult or difficult	23.9	43	23.5	42
Neutral	33.3	60	34.1	61
Very easy or easy	42.8	77	42.5	76
Total	100.0	180	100.0	179
Electives				
Very difficult or difficult	25.0	2	16.7	1
Neutral	12.5	1	16.7	1
Very easy or easy	62.5	5	66.7	4
Total	100.0	8	100.0	6
Geriatrics				
Very difficult or difficult	37.5	3	42.9	3
Neutral	37.5	3	14.3	1
Very easy or easy	25.0	2	42.9	3
Total	100.0	8	100.0	7
Orthopedics				
Very difficult or difficult	12.5	1	14.3	1
Neutral	12.5	1	14.3	1
Very easy or easy	75.0	6	71.4	5
Total	100.0	8	100.0	7
Other				
Very difficult or difficult	28.6	10	28.6	10
Neutral	45.7	16	42.9	15
Very easy or easy	25.7	9	28.6	10
Total	100.0	35	100.0	35

Note: The original 5-point scale was collapsed into a 3-point scale for reporting purposes.

TABLE 34. PROGRAMS' LEVELS OF ATTRITION OF CLINICAL PRECEPTORS FOR THEIR STUDENTS IN SPECIALTY AREAS

% n(P) % n(P) Family Medicine 52.4 87 51.8 87 Neutral 33.1 55 33.3 56 Very high or high 14.5 24 14.9 25 Total 100.0 166 100.0 168 General Internal Medicine 787 52.7 88 Neutral 32.1 53 30.5 51 Very high or high 15.2 25 16.8 28 Total 100.0 165 100.0 167 General Surgery 225 16.3 27 7 Very how or low 47.3 78 48.8 81 Neutral 37.6 62 34.9 58 Very high or high 15.2 25 16.3 27 Total 100.0 165 100.0 166 General Pediatrics Very high or high 31.3 51 32.9 54 Neutral 29.4		Clinical Sites		Prece	ptors
Family Medicine 52.4 87 51.8 87 Neutral 33.1 55 33.3 56 Very high or high 14.5 24 14.9 25 Total 100.0 166 100.0 168 General Internal Medicine 25 87 52.7 88 Neutral 32.1 53 30.5 51 Very high or high 15.2 25 16.8 28 Total 100.0 165 100.0 167 General Surgery 27.5 16.3 27.7 88 Neutral 37.6 62 34.9 58 Very low or low 47.3 78 48.8 81 Neutral 37.6 62 34.9 58 Very high or high 15.2 25 16.3 27 Total 100.0 165 100.0 164 Very low or low 31.3 51 32.9 54		%	n (P)	%	n (P)
Very low or low 52.4 87 51.8 87 Neutral 33.1 55 33.3 56 Very high or high 14.5 24 14.9 25 Total 100.0 166 100.0 168 General Internal Medicine 22.7 87 52.7 88 Neutral 32.1 53 30.5 51 Very high or high 15.2 25 16.8 28 Total 100.0 165 100.0 167 General Surgery 27.5 16.3 27.7 Very low or low 47.3 78 48.8 81 Neutral 37.6 62 34.9 58 Very low or low 15.2 25 16.3 27 Total 100.0 165 100.0 166 General Pediatrics 24 48 28.0 46 Very low or low 31.3 51 32.9 54 <	Family Medicine				
Neutral 33.1 55 33.3 56 Very high or high 14.5 24 14.9 25 Total 100.0 166 100.0 168 General Internal Medicine 52.7 87 52.7 88 Neutral 32.1 53 30.5 51 Very high or high 15.2 25 16.8 28 Total 100.0 165 100.0 167 General Surgery Very low or low 47.3 78 48.8 81 Neutral 37.6 62 34.9 58 27 Very low or low 47.3 78 48.8 81 Neutral 100.0 165 100.0 166 General Pediatrics 7 7 44 88 16 64 Very low or low 31.3 51 32.9 54 164 Very low or low 31.3 51 32.9 54 Neutral 29.4	Very low or low	52.4	87	51.8	87
Very high or high 14.5 24 14.9 25 Total 100.0 166 100.0 168 General Internal Medicine Very low or low 52.7 87 52.7 88 Neutral 32.1 53 30.5 51 Very high or high 15.2 25 16.8 28 Total 100.0 165 100.0 167 General Surgery Very low or low 47.3 78 48.8 81 Neutral 37.6 62 34.9 58 Very low or low 47.3 78 48.8 81 Neutral 37.6 62 34.9 58 Very high or high 15.2 25 16.3 27 Total 100.0 165 100.0 166 General Pediatrics Very low or low 31.3 51 32.9 54 Neutral 29.4 48 28.0 46 Very low or low 37.8	Neutral	33.1	55	33.3	56
Total 100.0 166 100.0 168 General Internal Medicine 52.7 87 52.7 88 Neutral 32.1 53 30.5 51 Very high or high 15.2 25 16.8 28 Total 100.0 165 100.0 167 General Surgery Very low or low 47.3 78 48.8 81 Neutral 37.6 62 34.9 58 Very low or low 47.3 78 48.8 81 Neutral 37.6 62 34.9 58 Very high or high 15.2 25 16.3 27 Total 100.0 165 100.0 166 General Pediatrics 100.0 163 32.9 54 Neutral 29.4 48 28.0 46 Very high or high 39.3 64 39.0 64 Total 100.0 163 100.0 164 <t< td=""><td>Very high or high</td><td>14.5</td><td>24</td><td>14.9</td><td>25</td></t<>	Very high or high	14.5	24	14.9	25
General Internal Medicine Very low or low 52.7 87 52.7 88 Neutral 32.1 53 30.5 51 Very high or high 15.2 25 16.8 28 Total 100.0 165 100.0 167 General Surgery Very low or low 47.3 78 48.8 81 Neutral 37.6 62 34.9 58 Very high or high 15.2 25 16.3 27 Total 100.0 165 100.0 166 General Pediatrics Very high or high 15.2 25 16.3 27 Total 100.0 163 100.0 166 100.0 166 General Pediatrics Very low or low 31.3 51 32.9 54 Neutral 29.4 48 28.0 46 Very high or high 39.3 64 39.0 64 Total 100.0 163 100.0	Total	100.0	166	100.0	168
Very low or low 52.7 87 52.7 88 Neutral 32.1 53 30.5 51 Very high or high 15.2 25 16.8 28 Total 100.0 165 100.0 167 General Surgery 78 48.8 81 Neutral 37.6 62 34.9 58 Very high or high 15.2 25 16.3 27 Total 100.0 165 100.0 166 General Pediatrics 100.0 165 100.0 166 Very low or low 31.3 51 32.9 54 Neutral 29.4 48 28.0 46 Very high or high 39.3 64 39.0 64 Total 100.0 163 100.0 164 Wery high or high 39.3 64 39.0 64 Very low or low 27.1 45 28.3 47 Neutral 040 <td>General Internal Medicine</td> <td></td> <td></td> <td></td> <td></td>	General Internal Medicine				
Neutral 32.1 53 30.5 51 Very high or high 15.2 25 16.8 28 Total 100.0 165 100.0 167 General Surgery 78 48.8 81 Neutral 37.6 62 34.9 58 Very high or high 15.2 25 16.3 27 Total 100.0 165 100.0 166 General Pediatrics 78 48.8 81 Very how or low 31.3 51 32.9 54 Neutral 29.4 48 28.0 46 Very high or high 39.3 64 39.0 64 Total 100.0 163 100.0 164 Very high or high 39.3 64 39.0 64 Very low or low 27.1 45 28.3 47 Neutral 24.1 40 21.7 36 Very high or high 38.8 81	Very low or low	52.7	87	52.7	88
Very high or high 15.2 25 16.8 28 Total 100.0 165 100.0 167 General Surgery 48.8 81 81 Neutral 37.6 62 34.9 58 Very high or high 15.2 25 16.3 27 Total 100.0 165 100.0 166 General Pediatrics 71 32.9 54 Very low or low 31.3 51 32.9 54 Neutral 29.4 48 28.0 46 Very low or low 31.3 51 32.9 54 Neutral 29.4 48 28.0 46 Very high or high 39.3 64 39.0 64 Total 100.0 163 100.0 164 Wery low or low 27.1 45 28.3 47 Neutral 24.1 40 21.7 36 Very low or low 37.8 62	Neutral	32.1	53	30.5	51
Total 100.0 165 100.0 167 General Surgery 47.3 78 48.8 81 Neutral 37.6 62 34.9 58 Very high or high 15.2 25 16.3 27 Total 100.0 165 100.0 166 General Pediatrics 100.0 165 100.0 166 Very low or low 31.3 51 32.9 54 Neutral 29.4 48 28.0 46 Very high or high 39.3 64 39.0 64 Total 100.0 163 100.0 164 Women's Health and OB/GYN Very low or low 27.1 45 28.3 47 Neutral 24.1 40 21.7 36 36 36 Very high or high 48.8 81 50.0 83 36 36 Very low or low 37.8 62 38.7 63 36.8 60	Very high or high	15.2	25	16.8	28
General Surgery Very low or low 47.3 78 48.8 81 Neutral 37.6 62 34.9 58 Very high or high 15.2 25 16.3 27 Total 100.0 165 100.0 166 General Pediatrics 7 74 48 28.0 46 Very low or low 31.3 51 32.9 54 Neutral 29.4 48 28.0 46 Very high or high 39.3 64 39.0 64 Total 100.0 163 100.0 164 Women's Health and OB/GYN 7 36 36 36 Very low or low 27.1 45 28.3 47 Neutral 24.1 40 21.7 36 Very high or high 48.8 81 50.0 83 Total 100.0 166 100.0 166 Behavioral/Mental Health 23.8 39	Total	100.0	165	100.0	167
Very low or low 47.3 78 48.8 81 Neutral 37.6 62 34.9 58 Very high or high 15.2 25 16.3 27 Total 100.0 165 100.0 166 General Pediatrics 78 48.8 28.0 46 Very low or low 31.3 51 32.9 54 Neutral 29.4 48 28.0 46 Very high or high 39.3 64 39.0 64 Total 100.0 163 100.0 164 Women's Health and OB/GYN 71 45 28.3 47 Neutral 24.1 40 21.7 36 Very low or low 27.1 45 28.3 47 Neutral 24.1 40 21.7 36 Very low or low 37.8 62 38.7 63 Neutral 38.4 63 36.8 60 Very low or low	General Surgery				
Neutral 37.6 62 34.9 58 Very high or high 15.2 25 16.3 27 Total 100.0 165 100.0 166 General Pediatrics Very low or low 31.3 51 32.9 54 Neutral 29.4 48 28.0 46 Very high or high 39.3 64 39.0 64 Total 100.0 163 100.0 164 Women's Health and OB/GYN 164 100.0 164 164 Very low or low 27.1 45 28.3 47 Neutral 24.1 40 21.7 36 Very high or high 48.8 81 50.0 83 Total 100.0 166 100.0 166 Behavioral/Mental Health 23.8 39 24.5 40 Very low or low 37.6 95 54.0 88 Neutral 23.8 39 24.5 40	Very low or low	47.3	78	48.8	81
Very high or high 15.2 25 16.3 27 Total 100.0 165 100.0 166 General Pediatrics 31.3 51 32.9 54 Neutral 29.4 48 28.0 46 Very high or high 39.3 64 39.0 64 Total 100.0 163 100.0 164 Women's Health and OB/GYN 100.0 163 100.0 164 Wory low or low 27.1 45 28.3 47 Neutral 24.1 40 21.7 36 Very high or high 48.8 81 50.0 83 Total 100.0 166 100.0 166 Behavioral/Mental Health 23.8 39 24.5 40 Very low or low 37.8 62 38.7 63 Neutral 38.4 63 36.8 60 Very high or high 23.8 39 24.5 40 Total 100.0 164 100.0 163 Emergency Med	Neutral	37.6	62	34.9	58
Total 100.0 165 100.0 166 General Pediatrics 51 32.9 54 Neutral 29.4 48 28.0 46 Very high or high 39.3 64 39.0 64 Total 100.0 163 100.0 164 Women's Health and OB/GYN 2 48 28.3 47 Very low or low 27.1 45 28.3 47 Neutral 24.1 40 21.7 36 Very high or high 48.8 81 50.0 83 Total 100.0 166 100.0 166 Behavioral/Mental Health 2 38.4 63 36.8 60 Very low or low 37.8 62 38.7 63 64 Very high or high 23.8 39 24.5 40 Total 100.0 164 100.0 163 Emergency Medicine 24 30.7 <td>Very high or high</td> <td>15.2</td> <td>25</td> <td>16.3</td> <td>27</td>	Very high or high	15.2	25	16.3	27
General Pediatrics Very low or low 31.3 51 32.9 54 Neutral 29.4 48 28.0 46 Very high or high 39.3 64 39.0 64 Total 100.0 163 100.0 164 Women's Health and OB/GYN 27.1 45 28.3 47 Neutral 24.1 40 21.7 36 Very low or low 27.1 45 28.3 47 Neutral 24.1 40 21.7 36 Very high or high 48.8 81 50.0 83 Total 100.0 166 100.0 166 Behavioral/Mental Health 23.8 37 63 60 Very low or low 37.6 25 38.7 63 Neutral 38.4 63 36.8 60 Very low or low 57.6 95 54.0 88 Neutral 27.9 46 30.7 <t< td=""><td>Total</td><td>100.0</td><td>165</td><td>100.0</td><td>166</td></t<>	Total	100.0	165	100.0	166
Very low or low 31.3 51 32.9 54 Neutral 29.4 48 28.0 46 Very high or high 39.3 64 39.0 64 Total 100.0 163 100.0 164 Women's Health and OB/GYN 71 45 28.3 47 Very low or low 27.1 45 28.3 47 Neutral 24.1 40 21.7 36 Very high or high 48.8 81 50.0 83 Total 100.0 166 100.0 166 Behavioral/Mental Health 78 62 38.7 63 Neutral 38.4 63 36.8 60 Very high or high 23.8 39 24.5 40 Total 100.0 164 100.0 163 Emergency Medicine 27.9 46 30.7 50 Very low or low 57.6 95 54.0 88 Neutral 27.9 46 30.7 50 Very high or high	General Pediatrics				
Neutral 29.4 48 28.0 46 Very high or high 39.3 64 39.0 64 Total 100.0 163 100.0 164 Women's Health and OB/GYN 2 45 28.3 47 Very low or low 27.1 45 28.3 47 Neutral 24.1 40 21.7 36 Very high or high 48.8 81 50.0 83 Total 100.0 166 100.0 166 Behavioral/Mental Health Very low or low 37.8 62 38.7 63 Neutral 38.4 63 36.8 60 60 100.0 163 Very low or low 37.8 62 38.7 63 64 60 Very high or high 23.8 39 24.5 40 163 164 100.0 163 Emergency Medicine Very low or low 57.6 95 54.0 88 81 82.5	Very low or low	31.3	51	32.9	54
Very high or high 39.3 64 39.0 64 Total 100.0 163 100.0 164 Women's Health and OB/GYN Very low or low 27.1 45 28.3 47 Neutral 24.1 40 21.7 36 Very high or high 48.8 81 50.0 83 Total 100.0 166 100.0 166 Behavioral/Mental Health Very low or low 37.8 62 38.7 63 Neutral 38.4 63 36.8 60 60 Very high or high 23.8 39 24.5 40 Total 100.0 164 100.0 163 Emergency Medicine Very low or low 57.6 95 54.0 88 Neutral 27.9 46 30.7 50 Very high or high 14.5 24 15.3 25 Total 100.0 165 100.0 163	Neutral	29.4	48	28.0	46
Total 100.0 163 100.0 164 Women's Health and OB/GYN Very low or low 27.1 45 28.3 47 Neutral 24.1 40 21.7 36 Very high or high 48.8 81 50.0 83 Total 100.0 166 100.0 166 Behavioral/Mental Health Very low or low 37.8 62 38.7 63 Neutral 38.4 63 36.8 60 40 164 100.0 163 Very low or low 37.8 62 38.7 63 64	Very high or high	39.3	64	39.0	64
Women's Health and OB/GYN Very low or low 27.1 45 28.3 47 Neutral 24.1 40 21.7 36 Very high or high 48.8 81 50.0 83 Total 100.0 166 100.0 166 Behavioral/Mental Health 7 7 45 28.3 47 Very low or low 37.8 62 38.7 63 63 60 Very high or high 23.8 39 24.5 40 40 163 Total 100.0 164 100.0 163 163 Emergency Medicine 7 46 30.7 50 Very low or low 57.6 95 54.0 88 Neutral 27.9 46 30.7 50 Very high or high 14.5 24 15.3 25 Total 100.0 165 100.0 163	Total	100.0	163	100.0	164
Very low or low 27.1 45 28.3 47 Neutral 24.1 40 21.7 36 Very high or high 48.8 81 50.0 83 Total 100.0 166 100.0 166 Behavioral/Mental Health 77.8 62 38.7 63 Very low or low 37.8 62 38.7 63 Neutral 38.4 63 36.8 60 Very high or high 23.8 39 24.5 40 Total 100.0 164 100.0 163 Emergency Medicine 77.9 46 30.7 50 Very low or low 57.6 95 54.0 88 Neutral 27.9 46 30.7 50 Very high or high 14.5 24 15.3 25 Total 100.0 165 100.0 163	Women's Health and OB/GYN				
Neutral 24.1 40 21.7 36 Very high or high 48.8 81 50.0 83 Total 100.0 166 100.0 166 Behavioral/Mental Health Very low or low 37.8 62 38.7 63 Neutral 38.4 63 36.8 60 Very high or high 23.8 39 24.5 40 Total 100.0 164 100.0 163 Emergency Medicine 23.8 39 24.5 40 Very low or low 57.6 95 54.0 88 Neutral 27.9 46 30.7 50 Very high or high 14.5 24 15.3 25 Total 100.0 165 100.0 163	Very low or low	27.1	45	28.3	47
Very high or high 48.8 81 50.0 83 Total 100.0 166 100.0 166 Behavioral/Mental Health 37.8 62 38.7 63 Very low or low 37.8 62 38.7 63 Neutral 38.4 63 36.8 60 Very high or high 23.8 39 24.5 40 Total 100.0 164 100.0 163 Emergency Medicine 57.6 95 54.0 88 Neutral 27.9 46 30.7 50 Very high or high 14.5 24 15.3 25 Total 100.0 165 100.0 163	Neutral	24.1	40	21.7	36
Total 100.0 166 100.0 166 Behavioral/Mental Health <	Very high or high	48.8	81	50.0	83
Behavioral/Mental Health Very low or low 37.8 62 38.7 63 Neutral 38.4 63 36.8 60 Very high or high 23.8 39 24.5 40 Total 100.0 164 100.0 163 Emergency Medicine Very low or low 57.6 95 54.0 88 Neutral 27.9 46 30.7 50 Very high or high 14.5 24 15.3 25 Total 100.0 165 100.0 163	Total	100.0	166	100.0	166
Very low or low 37.8 62 38.7 63 Neutral 38.4 63 36.8 60 Very high or high 23.8 39 24.5 40 Total 100.0 164 100.0 163 Emergency Medicine 57.6 95 54.0 88 Neutral 27.9 46 30.7 50 Very high or high 14.5 24 15.3 25 Total 100.0 165 100.0 163	Behavioral/Mental Health				
Neutral 38.4 63 36.8 60 Very high or high 23.8 39 24.5 40 Total 100.0 164 100.0 163 Emergency Medicine 57.6 95 54.0 88 Neutral 27.9 46 30.7 50 Very high or high 14.5 24 15.3 25 Total 100.0 165 100.0 163	Very low or low	37.8	62	38.7	63
Very high or high 23.8 39 24.5 40 Total 100.0 164 100.0 163 Emergency Medicine 57.6 95 54.0 88 Very low or low 57.6 95 54.0 88 Neutral 27.9 46 30.7 50 Very high or high 14.5 24 15.3 25 Total 100.0 165 100.0 163	Neutral	38.4	63	36.8	60
Total 100.0 164 100.0 163 Emergency Medicine 57.6 95 54.0 88 Very low or low 57.6 95 54.0 88 Neutral 27.9 46 30.7 50 Very high or high 14.5 24 15.3 25 Total 100.0 165 100.0 163	Very high or high	23.8	39	24.5	40
Emergency Medicine 57.6 95 54.0 88 Very low or low 57.6 95 54.0 88 Neutral 27.9 46 30.7 50 Very high or high 14.5 24 15.3 25 Total 100.0 165 100.0 163	Total	100.0	164	100.0	163
Very low or low 57.6 95 54.0 88 Neutral 27.9 46 30.7 50 Very high or high 14.5 24 15.3 25 Total 100.0 165 100.0 163	Emergency Medicine				
Neutral 27.9 46 30.7 50 Very high or high 14.5 24 15.3 25 Total 100.0 165 100.0 163	Verv low or low	57.6	95	54.0	88
Very high or high 14.5 24 15.3 25 Total 100.0 165 100.0 163	Neutral	27.9	46	30.7	50
Total 100.0 165 100.0 163	Very high or high	14.5	24	15.3	25
	Total	100.0	165	100.0	163
Electives	Electives				
Very low or low 75.0 3 75.0 3	Very low or low	75.0	3	75.0	3
Neutral 0.0 0 0.0 0	Neutral	0.0	0	0.0	0
Very high or high 25.0 1 25.0 1	Very high or high	25.0	1	25.0	- 1
Total 100.0 4 100.0 4	Total	100.0	4	100.0	4

CONTINUED

Table 34 displays programs' levels of attrition of clinical preceptors for their students in specialty areas. Attrition is defined as the reduction in the number of clinical sites and preceptors in specialty areas. Programs had the highest attrition rates for clinical sites in women's health and OB/GYN (48.8%), general pediatrics (39.3%), and behavioral/mental health (23.8%). Programs had the highest attrition rates for preceptors in women's health and OB/GYN (50.0%), general pediatrics (39.0%), and behavioral/mental health (24.5%).

TABLE 34. PROGRAMS' LEVELS OF ATTRITION OF CLINICAL PRECEPTORS FOR THEIR STUDENTS IN SPECIALTY AREAS, CONTINUED

	Clinical Sites		Prece	ptors
	%	n (P)	%	n (P)
Geriatrics				
Very low or low	66.7	4	66.7	4
Neutral	33.3	2	33.3	2
Very high or high	0.0	0	0.0	0
Total	100.0	6	100.0	6
Orthopedics				
Very low or low	100.0	4	100.0	4
Neutral	0.0	0	0.0	0
Very high or high	0.0	0	0.0	0
Total	100.0	4	100.0	4
Other				
Very low or low	40.5	15	48.8	21
Neutral	51.4	19	39.5	17
Very high or high	8.1	3	11.6	5
Total	100.0	37	100.0	43

TABLE 35. ELEMENTS PROGRAMS FOUND CHALLENGING IN SECURING CLINICAL ROTATIONS FOR STUDENTS

	%	n (P)
	20.7	50
Very challenging	29.7	5Z
Moderately challenging	57.7	101
Not at all challenging	12.6	22
lotal	100.0	175
Administrative elements at the site		
Very challenging	28.6	50
Moderately challenging	64.6	113
Not at all challenging	6.9	12
Total	100.0	175
Competition with in-state PA programs		
Very challenging	54.4	92
Moderately challenging	36.1	61
Not at all challenging	9.5	16
Total	100.0	169
Competition with out-of-state PA programs		
Very challenging	26.5	44
Moderately challenging	38.0	63
Not at all challenging	35.5	59
Total	100.0	166
Competition with other health professions programs		
Very challenging	64.8	114
Moderately challenging	31.3	55
Not at all challenging	4.0	7
Total	100.0	176
Increased enrollment and demands on sites		
Very challenging	55.8	87
Moderately challenging	37.2	58
Not at all challenging	7.1	11
Total	100.0	156
Issues surrounding EHRs		
Very challenging	26.2	45
Moderately challenging	58.7	101
Not at all challenging	15.1	26
Total	100.0	172
Legal and liability issues		
Very challenging	16.0	28
Moderately challenging	46.9	82
Not at all challenging	37.1	65
Total	100.0	175

CONTINUED

Table 35 shows that the top five elements that programs found very challenging in securing clinical rotations for their students (when considering both clinical training sites and preceptors in any specialty) included competition with other health professional programs (64.8%), increased enrollment and demands on sites (55.8%), competition with in-state PA programs (54.4%), recruitment of sites (49.7%), and recruitment of preceptors (46.8%).

TABLE 35. ELEMENTS PROGRAMS FOUND CHALLENGING IN SECURING CLINICAL ROTATIONS FOR STUDENTS, CONTINUED

	%	n (P)
Quality of preceptors	4.0	-
Very challenging	1.8	3
Moderately challenging	49.4	84
Not at all challenging	48.8	83
Total	100.0	170
Quality of sites		
Very challenging	2.4	4
Moderately challenging	52.9	90
Not at all challenging	44.7	76
Total	100.0	170
Recruitment of preceptors		
Very challenging	46.8	81
Moderately challenging	46.8	81
Not at all challenging	6.4	11
Total	100.0	173
Recruitment of sites		
Very challenging	49.7	86
Moderately challenging	45.1	78
Not at all challenging	5.2	9
Total	100.0	173
Training of preceptors		
Very challenging	8.0	14
Moderately challenging	50.6	88
Not at all challenging	41.4	72
Total	100.0	174
Training of sites		
Very challenging	8.1	14
Moderately challenging	50.6	87
Not at all challenging	41.3	71
Total	100.0	172
Student resistance to remote placement		
Very challenging	19.1	30
Moderately challenging	47.8	75
Not at all challenging	33.1	52
Total	100.0	157
Request for payment from sites		
Very challenging	31.7	52
Moderately challenging	47.6	78
Not at all challenging	20.7	34
Total	100.0	164

CONTINUED

TABLE 35. ELEMENTS PROGRAMS FOUND CHALLENGING IN SECURING CLINICAL ROTATIONS FOR STUDENTS, CONTINUED

	%	n (P)
Concern about preceptor productivity		
Very challenging	36.7	62
Moderately challenging	42.0	71
Not at all challenging	21.3	36
Total	100.0	169
Lack of financial support for remote placements		
Very challenging	28.9	43
Moderately challenging	43.0	64
Not at all challenging	28.2	42
Total	100.0	149
Loss of AHEC support		
Very challenging	20.2	24
Moderately challenging	38.7	46
Not at all challenging	41.2	49
Total	100.0	119

TABLE 36. METHODS PROGRAMS FOUND SUCCESSFUL TO ADDRESS CHALLENGES IN SECURING CLINICAL ROTATIONS

	%	n (P)
Additional remote clinical sites		
Very unsuccessful or unsuccessful	15.0	21
Neutral	37.9	53
Very successful or successful	47.1	66
Total	100.0	140
Change criteria for preceptors		
Very unsuccessful or unsuccessful	7.9	5
Neutral	63.5	40
Very successful or successful	28.6	18
Total	100.0	63
Decrease weeks required in all rotations		
Very unsuccessful or unsuccessful	37.5	9
Neutral	33.3	8
Very successful or successful	29.2	7
Total	100.0	24
Change criteria for sites		
	7.8	5
Neutral	60.9	39
Very successful or successful	31.3	20
Total	100.0	64
		•••
Venuesussessful or unsussessful	29.4	10
Neutral	20.0	14
Venusuecessful or successful	22.2	10
	100 0	14
	100.0	42
Exclusivity contracts		
Very unsuccessful or unsuccessful	50.7	35
Neutral	20.3	14
Very successful or successful	29.0	20
lotal	100.0	69
Expand radius in which sites are located		
Very unsuccessful or unsuccessful	11.3	16
Neutral	34.8	49
Very successful or successful	53.9	76
Total	100.0	141
Increase weeks required in some rotations		
Very unsuccessful or unsuccessful	22.9	8
Neutral	37.1	13
Very successful or successful	40.0	14
Total	100.0	35

CONTINUED

Table 36 shows that the top five methods programs found successful or very successful to address any challenges in securing clinical rotations for their students included expanding the radius in which sites are located (53.9%), strategic relationship building (52.4%), financial incentives (47.5%), additional remote clinical sites (47.1%), and interprofessional education (IPE; 44.0%).

TABLE 36. METHODS PROGRAMS FOUND SUCCESSFUL TO ADDRESS CHALLENGES IN SECURING CLINICAL ROTATIONS, CONTINUED

Non-Financial incentives 32.4 45 Neutral 32.4 45 Neutral 32.4 45 Very unsuccessful or successful 35.3 49 Total 100.0 139 Offer CME I 29.0 31 Neutral 27.1 29 Very unsuccessful or unsuccessful 43.9 47 Total 100.0 107 Offer CME I 29.0 31 Very unsuccessful or unsuccessful 33.9 47 Total 100.0 107 Offer CME II 29 48 Neutral 30.2 39 Very unsuccessful or unsuccessful 37.2 48 Neutral 30.2 39 Very unsuccessful or successful 32.6 42 Total 100.0 129 Professional development opportunities 24 40 Neutral 31.0 26 Very unsuccessful or unsuccessful 31.0 26 Very uns		%	n (P)
Very unsuccessful or unsuccessful 32.4 45 Neutral 32.4 45 Very successful or successful 35.3 49 Total 100.0 139 Offer CME I 29.0 31 Neutral 27.1 29 Very unsuccessful or unsuccessful 43.9 47 Total 100.0 107 Offer CME I 29.0 31 Very successful or successful 43.9 47 Total 100.0 107 Offer CME II 29 24 48 Neutral 30.2 39 29 Very unsuccessful or unsuccessful 32.6 42 Total 100.0 129 Professional development opportunities 20.3 12 Very unsuccessful or unsuccessful 21.4 18 Total 100.0 84 Financial incentives 22.2 19 Neutral 20.3 12 Very unsuccessful or unsuccessful 32.2	Non-Financial incentives		
Neutral 32.4 45 Very successful or successful 35.3 49 Total 100.0 139 Offer CME I 29.0 31 Neutral 27.1 29 Very unsuccessful or unsuccessful 43.9 47 Total 100.0 107 Offer CME I 30.2 39 Very successful or unsuccessful 37.2 48 Neutral 30.2 39 Very unsuccessful or unsuccessful 32.6 42 Total 100.0 129 Prefessional development opportunities 7 48 Very unsuccessful or unsuccessful 47.6 40 Neutral 31.0 26 Very unsuccessful or unsuccessful 21.4 18 Total 100.0 84 Financial incentives 22.2 19 Neutral 20.3 12 Very unsuccessful or unsuccessful 32.2 19 Neutral 20.3 12	Very unsuccessful or unsuccessful	32.4	45
Very successful or successful 35.3 49 Total 100.0 139 Offer CME I 29.0 31 Neutral 27.1 29 Very successful or unsuccessful 43.9 47 Total 100.0 107 Offer CME II 30.2 39 Very unsuccessful or unsuccessful 37.2 48 Neutral 30.2 39 Very unsuccessful or successful 32.6 42 Total 100.0 129 Professional development opportunities 20.0 129 Very unsuccessful or unsuccessful 47.6 40 Neutral 31.0 26 Very unsuccessful or unsuccessful 21.4 18 Total 100.0 84 Financial incentives 22.19 19 Neutral 20.3 12 Very unsuccessful or unsuccessful 32.2 19 Neutral 100.0 59 Reduce enrollment capacity 28 28	Neutral	32.4	45
Total 100.0 139 Offer CME I 29.0 31 Neutral 27.1 29 Very successful or successful 43.9 47 Total 100.0 107 Offer CME I 27.1 29 Very unsuccessful or unsuccessful 37.2 48 Neutral 30.2 39 Very unsuccessful or unsuccessful 32.6 42 Total 100.0 129 Professional development opportunities 26 40 Neutral 31.0 26 Very unsuccessful or unsuccessful 47.6 40 Neutral 31.0 26 Very unsuccessful or unsuccessful 21.4 18 Total 100.0 84 Financial incentives 20.3 12 Very unsuccessful or unsuccessful 32.2 19 Neutral 20.3 12 Very unsuccessful or successful 32.2 19 Neutral 20.3 12	Very successful or successful	35.3	49
Offer CME I 29.0 31 Neutral 27.1 29 Very successful or successful 43.9 47 Total 100.0 107 Offer CME II 30.2 39 Very unsuccessful or unsuccessful 32.2 42 Total 100.0 129 Professional development opportunities 40 129 Very unsuccessful or unsuccessful 31.0 26 Very successful or unsuccessful 21.4 18 Total 100.0 84 Financial incentives 20.3 12 Very unsuccessful or unsuccessful 32.2 19 Neutral 30.0 84 Financial incentives 20.3 12 Very unsuccessful or unsuccessful 32.2 19 Neutral 20.3 12 Very unsuccessful or successful 32.2 19 Neutral 20.3 12 Very unsuccessful or unsuccessful 58.3 21 Neutral 25.0	Total	100.0	139
Very unsuccessful or unsuccessful 29.0 31 Neutral 27.1 29 Very successful or successful 43.9 47 Total 100.0 107 Offer CME II 30.2 39 Very unsuccessful or unsuccessful 37.2 48 Neutral 30.2 39 Very unsuccessful or successful 32.6 42 Total 100.0 129 Professional development opportunities 40 129 Very unsuccessful or unsuccessful 47.6 40 Neutral 31.0 26 Very unsuccessful or successful 21.4 18 Total 100.0 84 Financial incentives 20.3 12 Very unsuccessful or unsuccessful 32.2 19 Neutral 20.3 12 Very unsuccessful or successful 32.2 19 Neutral 20.3 12 Very unsuccessful or successful 58.3 21 Neutral 25.0	Offer CME I		
Neutral 27.1 29 Very successful or successful 43.9 47 Total 100.0 107 Offer CME II 37.2 48 Neutral 30.2 39 Very successful or successful 32.6 42 Total 100.0 129 Professional development opportunities 47.6 40 Neutral 31.0 26 Very successful or successful 47.6 40 Neutral 31.0 26 Very successful or successful 21.4 18 Total 100.0 84 Financial incentives 20.3 12 Very unsuccessful or successful 32.2 19 Neutral 20.3 12 Very unsuccessful or successful 32.2 19 Neutral 20.3 12 Very unsuccessful or successful 32.2 19 Neutral 20.3 12 Very unsuccessful or successful 58.3 21 <t< td=""><td>Very unsuccessful or unsuccessful</td><td>29.0</td><td>31</td></t<>	Very unsuccessful or unsuccessful	29.0	31
Very successful or successful 43.9 47 Total 100.0 107 Offer CME II 37.2 48 Neutral 30.2 39 Very successful or successful 32.6 42 Total 100.0 129 Professional development opportunities 47.6 40 Neutral 31.0 26 Very unsuccessful or unsuccessful 47.6 40 Neutral 31.0 26 Very unsuccessful or unsuccessful 41.4 18 Total 100.0 84 Financial incentives 7 9 Very unsuccessful or unsuccessful 32.2 19 Neutral 20.3 12 Very unsuccessful or unsuccessful 32.2 19 Neutral 20.3 12 Very unsuccessful or successful 32.2 19 Neutral 20.3 21 Very unsuccessful or unsuccessful 58.3 21 Neutral 25.0 9 <td>Neutral</td> <td>27.1</td> <td>29</td>	Neutral	27.1	29
Total 100.0 107 Offer CME II 37.2 48 Neutral 30.2 39 Very successful or successful 32.6 42 Total 100.0 129 Professional development opportunities 47.6 40 Neutral 31.0 26 Very unsuccessful or unsuccessful 47.6 40 Neutral 31.0 26 Very successful or successful 21.4 18 Total 100.0 84 Financial incentives 20.3 12 Very unsuccessful or unsuccessful 32.2 19 Neutral 20.3 12 Very unsuccessful or unsuccessful 32.2 19 Neutral 20.3 12 Very unsuccessful or unsuccessful 35.0 9 Very unsuccessful or unsuccessful 47.5 28 Total 100.0 36 Simulation 36 5 Very unsuccessful or unsuccessful 35.6 21	Very successful or successful	43.9	47
Offer CME II 37.2 48 Neutral 30.2 39 Very successful or successful 32.6 42 Total 100.0 129 Professional development opportunities 47.6 40 Neutral 31.0 26 Very unsuccessful or unsuccessful 47.6 40 Neutral 31.0 26 Very successful or successful 21.4 18 Total 100.0 84 Financial incentives 20.3 12 Very unsuccessful or unsuccessful 32.2 19 Neutral 20.3 12 Very unsuccessful or unsuccessful 47.5 28 Total 100.0 59 Reduce enrollment capacity 25.0 9 Very unsuccessful or unsuccessful 16.7 6 Total 100.0 36 Simulation 35.6 21 Neutral 30.5 18 Very unsuccessful or successful 33.9 20	Total	100.0	107
Very unsuccessful or unsuccessful 37.2 48 Neutral 30.2 39 Very successful or successful 32.6 42 Total 100.0 129 Professional development opportunities 47.6 40 Neutral 31.0 26 Very unsuccessful or unsuccessful 47.6 40 Neutral 31.0 26 Very successful or successful 21.4 18 Total 100.0 84 Financial incentives 20.3 12 Very unsuccessful or unsuccessful 32.2 19 Neutral 20.3 12 Very unsuccessful or unsuccessful 32.2 19 Neutral 20.3 12 Very unsuccessful or successful 47.5 28 Total 100.0 59 Reduce enrollment capacity 58.3 21 Neutral 25.0 9 9 Very unsuccessful or unsuccessful 16.7 6 Total 100.	Offer CME II		
Neutral 30.2 39 Very successful or successful 32.6 42 Total 100.0 129 Professional development opportunities 47.6 40 Neutral 31.0 26 Very unsuccessful or unsuccessful 21.4 18 Total 100.0 84 Total 100.0 84 Financial incentives 20.3 12 Very unsuccessful or unsuccessful 32.2 19 Neutral 20.3 12 Very unsuccessful or unsuccessful 32.2 19 Neutral 20.3 12 Very unsuccessful or successful 47.5 28 Total 100.0 59 Reduce enrollment capacity 58.3 21 Neutral 25.0 9 Very unsuccessful or unsuccessful 16.7 6 Total 100.0 36 Simulation 35.6 21 Neutral 30.5 18 Very su	Very unsuccessful or unsuccessful	37.2	48
Very successful or successful 32.6 42 Total 100.0 129 Professional development opportunities 47.6 40 Neutral 31.0 26 Very successful or unsuccessful 21.4 18 Total 100.0 84 Financial incentives 20.3 12 Very unsuccessful or unsuccessful 32.2 19 Neutral 20.3 12 Very unsuccessful or unsuccessful 32.2 19 Neutral 20.3 12 Very unsuccessful or successful 47.5 28 Total 100.0 59 Reduce enrollment capacity 47.5 28 Very unsuccessful or unsuccessful 58.3 21 Neutral 25.0 9 9 Very successful or successful 16.7 6 Total 100.0 36 36 Simulation 35.6 21 1 Very unsuccessful or successful 35.6 18 37	Neutral	30.2	39
Total100.0129Professional development opportunities47.640Neutral31.026Very unsuccessful or unsuccessful21.418Total100.084Financial incentives32.219Neutral20.312Very unsuccessful or successful32.219Neutral20.312Very successful or successful47.528Total100.059Reduce enrollment capacity58.321Neutral25.09Very successful or successful16.76Total100.036Simulation100.036Very unsuccessful or unsuccessful35.621Neutral30.518Very successful or successful33.920	Very successful or successful	32.6	42
Professional development opportunitiesVery unsuccessful or unsuccessful47.640Neutral31.026Very successful or successful21.418Total100.084Financial incentives20.312Very unsuccessful or unsuccessful32.219Neutral20.312Very successful or successful47.528Total100.059Reduce enrollment capacity58.321Neutral25.09Very successful or successful16.76Total100.036Simulation59Very unsuccessful or unsuccessful35.621Neutral30.518Very successful or successful33.920	Total	100.0	129
Very unsuccessful or unsuccessful47.640Neutral31.026Very successful or successful21.418Total100.084Financial incentives32.219Neutral20.312Very unsuccessful or unsuccessful47.528Total100.059Reduce enrollment capacity58.321Neutral25.09Very successful or successful16.76Total100.036Simulation35.621Neutral30.518Very successful or successful33.920	Professional development opportunities		
Neutral31.026Very successful or successful21.418Total100.084Financial incentives32.219Very unsuccessful or unsuccessful32.219Neutral20.312Very successful or successful47.528Total100.059Reduce enrollment capacity58.321Very unsuccessful or successful58.321Neutral25.09Very successful or successful16.76Total100.036Simulation100.036Very unsuccessful or unsuccessful35.621Neutral30.518Very successful or successful33.920	Very unsuccessful or unsuccessful	47.6	40
Very successful or successful21.418Total100.084Financial incentives32.219Very unsuccessful or unsuccessful32.219Neutral20.312Very successful or successful47.528Total100.059Reduce enrollment capacity58.321Neutral25.09Very successful or successful16.76Total100.036Simulation100.036Very unsuccessful or unsuccessful35.621Neutral30.518Very successful or successful33.920	Neutral	31.0	26
Total100.084Financial incentives32.219Very unsuccessful or unsuccessful32.219Neutral20.312Very successful or successful47.528Total100.059Reduce enrollment capacity58.321Neutral25.09Very successful or successful16.76Total100.036Simulation35.621Neutral30.518Very successful or successful33.920	Very successful or successful	21.4	18
Financial incentivesVery unsuccessful or unsuccessful32.219Neutral20.312Very successful or successful47.528Total100.059Reduce enrollment capacity58.321Very unsuccessful or unsuccessful58.321Neutral25.09Very successful or successful16.76Total100.036Simulation518Very unsuccessful or successful33.920	Total	100.0	84
Very unsuccessful or unsuccessful32.219Neutral20.312Very successful or successful47.528Total100.059Reduce enrollment capacity58.321Very unsuccessful or unsuccessful58.321Neutral25.09Very successful or successful16.76Total100.036Simulation35.621Neutral30.518Very successful or successful33.920	Financial incentives		
Neutral20.312Very successful or successful47.528Total100.059Reduce enrollment capacity58.321Very unsuccessful or unsuccessful58.321Neutral25.09Very successful or successful16.76Total100.036Simulation35.621Neutral30.518Very successful or successful33.920	Very unsuccessful or unsuccessful	32.2	19
Very successful or successful47.528Total100.059Reduce enrollment capacityVery unsuccessful or unsuccessful58.321Neutral25.09Very successful or successful16.76Total100.036Simulation35.621Neutral30.518Very successful or successful33.920	Neutral	20.3	12
Total100.059Reduce enrollment capacityVery unsuccessful or unsuccessful58.321Neutral25.09Very successful or successful16.76Total100.036Simulation35.621Neutral30.518Very successful or successful33.920	Very successful or successful	47.5	28
Reduce enrollment capacityVery unsuccessful or unsuccessful58.321Neutral25.09Very successful or successful16.76Total100.036Simulation35.621Neutral30.518Very successful or successful33.920	Total	100.0	59
Very unsuccessful or unsuccessful58.321Neutral25.09Very successful or successful16.76Total100.036Simulation35.621Neutral30.518Very successful or successful33.920	Reduce enrollment capacity		
Neutral25.09Very successful or successful16.76Total100.036Simulation35.621Very unsuccessful or unsuccessful35.618Very successful or successful33.920	Very unsuccessful or unsuccessful	58.3	21
Very successful or successful16.76Total100.036Simulation35.621Neutral30.518Very successful or successful33.920	Neutral	25.0	9
Total100.036Simulation35.621Neutral30.518Very successful or successful33.920	Very successful or successful	16.7	6
SimulationVery unsuccessful or unsuccessful35.621Neutral30.518Very successful or successful33.920	Total	100.0	36
Very unsuccessful or unsuccessful35.621Neutral30.518Very successful or successful33.920	Simulation		
Neutral30.518Very successful or successful33.920	Very unsuccessful or unsuccessful	35.6	21
Very successful or successful 33.9 20	Neutral	30.5	18
	Very successful or successful	33.9	20
Total 100.0 59	Total	100.0	59
Strategic relationship building	Strategic relationship building		
Very unsuccessful or unsuccessful 20.3 29	Very unsuccessful or unsuccessful	20.3	29
Neutral 27.3 39	Neutral	27.3	39
Very successful or successful 52.4 75	Very successful or successful	52.4	75
Total 100.0 143	Total	100.0	143

CONTINUED

TABLE 36. METHODS PROGRAMS FOUND SUCCESSFUL TO ADDRESS CHALLENGES IN SECURING CLINICAL ROTATIONS, CONTINUED

	%	n (P)
Telemedicine/Telehealth		
Very unsuccessful or unsuccessful	69.6	16
Neutral	21.7	5
Very successful or successful	8.7	2
Total	100.0	23
IPE		
Very unsuccessful or unsuccessful	26.0	26
Neutral	30.0	30
Very successful or successful	44.0	44
Total	100.0	100
Collaboration with other PA programs		
Very unsuccessful or unsuccessful	54.4	56
Neutral	27.2	28
Very successful or successful	18.4	19
Total	100.0	103
Collaboration with other health professions programs		
Very unsuccessful or unsuccessful	44.7	51
Neutral	26.3	30
Very successful or successful	28.9	33
Total	100.0	114
Other		
Very unsuccessful or unsuccessful	0.0	0
Neutral	40.0	2
Very successful or successful	60.0	3
Total	100.0	5

FUTURE DIRECTION

Starting with the 2015 administration of the Program Survey, portions of the Curriculum Survey will be included on a 3-year rotational basis, beginning with prerequisites. The didactic and clinical portions will be included in subsequent administrations. PAEA will continue to include questions from the STAR Program. Given the removal of the employee profile section of the Program Survey, the inclusion of these extra questions will not make the survey much longer than it was before. PAEA welcomes requests from researchers who wish to conduct additional analyses of the data. Data request forms can be found on our website: PAEAonline.org. Under the guidance of the Research Council, PAEA research staff periodically will add research questions of interest to the profession to our surveys as current issues in PA education evolve.