

TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION.....	1
METHODS.....	2
The Survey Instrument.....	2
Survey Period and Response Rate.....	2
Date Entry and Analysis.....	2
The “Typical” P.A. Program.....	3
Analysis of Trends Over Time: 1984-2006.....	3
Additional Copies of the Report.....	3
RESULTS AND DISCUSSION.....	4
SECTION I. GENERAL PROGRAM CHARACTERISTICS	4
Listing of P.A. Programs by Consortia Region.....	4
Year Current P.A. Programs Were Established, 1965 Through 2006.....	6
Current P.A. Programs by Length of Curriculum.....	7
Current P.A. Programs by Month of Graduation.....	8
Financial Characteristics of P.A. Programs.....	8
Program Budget and Federal Support by Region.....	10
Student Educational Expenses.....	11
Student Expenses by Consortia Region.....	12
Trends in P.A. Student Expenses.....	13
SECTION II. PROGRAM PERSONNEL.....	15
Classification of Physician Assistant Program Personnel.....	15
Number of P.A. and Non-P.A. Program Personnel by Category.....	16
Number of P.A. Program Personnel by Region.....	16
General Characteristics of P.A.s and Non-P.A.s Employed by Programs.....	17
Clinical Activity of Physician Assistant Personnel.....	17
Personnel by Region: Salary, Months in Position and Ethnicity.....	21
Trends in P.A. Program Personnel Salaries, 1985 Through 2006.....	22
Program Personnel: Academic Classification.....	23
P.A. and Non-P.A. Personnel Salary Analysis.....	25
Program Directors of Physician Assistant Programs.....	27
Program Director Salaries: Regional Differences.....	28
Medical Directors of Physician Assistant Programs.....	28
Comparisons between Medical and Program Directors.....	29
Regression Analysis of Salaries.....	31
P.A. Program Personnel Turnover.....	32
SECTION III. P.A. STUDENT CHARACTERISTICS.....	37
Physician Assistant Student Enrollment.....	37
Trends in Maximum Capacity and Student Enrollment.....	38
First Year Students Enrolled.....	39
First Year Students Enrolled by Consortia Region.....	40
Trends in First Year P.A. Student Enrollment, 1983 Through 2006.....	41
Total Enrollment in P.A. Programs.....	43
First Year Students Enrolled by Age.....	44
First Year Students Enrolled by Age and Consortia Region.....	44

TABLE OF CONTENTS (continued)

Page

Trends in Enrollment by Age.....	45
Average Age of First Year Enrolled Students.....	46
First Year Students Enrolled by Ethnicity.....	46
Ethnic Representation of First Year Enrollees by Consortia Region	47
Number of Programs versus Percent First Year Minority Student Enrollment	47
Trends in First Year Minority Student Enrollment, 1983 Through 2006.....	48
Academic Characteristics of First Year P.A. Students	49
Academic Characteristics of First Year Enrolled P.A. Students by Consortia Region.....	50

SECTION IV. GRADUATE INFORMATION..... 52

Number and Attrition of Students by Gender.....	52
Attrition Rates of Students by Consortia Region	53
Graduation, Attrition and Deceleration of Students by Age.....	54
Trends in Student Attrition, 1984 Through 2006.....	55
Gender and Ethnicity of 2006 P.A. Graduates by Consortia Region.....	55
Trends in the Graduation of Minorities	56
Employment Status of 2006 P.A. Graduates.....	57
Number of Recent Graduates by State.....	58
2006 Program Graduates: Employment Status by Consortia Region	58
Trends in Medical Specialty Selection of Recent Graduates, 1985 Through 2006	58
Employment of Recent Graduates in Primary & Non-Primary Care by Consortia Region.....	59
Medical Specialty Selection of Recent Graduates by Consortia Region	61
Regional Variation and Trends in New Graduate Starting Salaries	62

SUMMARY AND CONCLUSIONS..... 64

Section I. General Characteristics of P.A. Programs	64
Section II. Program Personnel.....	65
Section III. P.A. Student Characteristics	66
Section IV. Graduate Information.....	66

REFERENCES 67

LIST OF TABLES

<u>Table</u>	<u>Page</u>
1 Consortium Region of Operational Physician Assistant Programs	4
2 P.A. Programs by Type of Sponsoring Institution and Credential Awarded.....	6
3 Sources of Financial Support for Physician Assistant Programs	9
4 Total Program Budget and Federal Training Grant Support by Consortia Region	10
5 Trends in Physician Assistant Program Support, 1984 Through 2006	10
6 Tuition and Expenses of P.A. Students.....	11
7 Financial Aid Support Provided P.A. Students	12
8 Expenses of P.A. Students by Consortia Region	12
9 Trends in P.A. Student Expenses, 1984 Through 2006.....	13
10 Classification of Program Personnel by Category.....	15
11 P.A. and Non-P.A. Program Personnel by Category.....	16
12 P.A. and Non-P.A. Program Personnel by Category and Region.....	16
13 General Characteristics of Physician Assistant Personnel.....	17
14 General Characteristics of Clinically Active Physician Assistant Personnel.....	18
15 General Characteristics of Non-P.A. Personnel.....	19
16 Salary and Months in Position of Cat. I - III P.A. and Non-P.A. Personnel by Ethnicity and Gender.....	19
17 Salary and Months in Position of Cat. IV Personnel by Ethnicity and Gender	20
18 Analysis of Salary, Percent Time & Months in Position of P.A. & Non-P.A. Personnel by Gender	20
19 Program Personnel: Salary and Time in Position by Region.....	21
20 Analysis of Program Personnel Salary by Geographic Region and Ethnicity: Cat. I - III	21
21 Analysis of Program Personnel Salary by Geographic Region and Ethnicity: Cat. IV	22
22 Salary and Months in Position for P.A. Personnel, 1985 Through 2006.....	22
23 Program Personnel: Classification and Tenure Track Status	24
24 Program Personnel: Classification and Tenure Track Status by Gender	24
25 Program Personnel: Highest Degree Held	25
26 Program Personnel: Academic Rank of Faculty	25
27 Faculty and Staff Salaries by Category	25
28 Program Personnel Salary of Faculty and Staff in Cat. I - III by Gender	26
29 Salary of Faculty and Staff Personnel by Highest Degree Held	26
30 Salary of Program Faculty by Academic Rank and Category.....	27
31 Characteristics of Program Directors	27
32 Salary and Months in Position of Program Directors by Region.....	28
33 Characteristics of Program Medical Directors	28
34 Salary and Months in Position of Medical Directors by Region.....	29
35 Medical Specialties of P.A. Program Medical Directors	29
36 Trends in Directors' Salaries and Months in Position from 1984 through 2006.....	30
37 Program and Medical Directors: Position and Tenure Track Status	30
38 Program and Medical Directors: Academic Rank	31
39 Regression Equations for Salary and Months in Position for P.A. Program Personnel	32
40 Program Personnel Turnover, 1986 through 2005	32
41 Program Personnel Turnover by Region, 1986 through 2005	33
42 Comparison of Personnel Turnover in 2005 by Category.....	34
43 Characteristics of Personnel Departed and Employed in 2005.....	35
44 P.A. Program Personnel Turnover in 2005: Academic Characteristics.....	35
45 P.A. Program Personnel Turnover: Reasons for Termination in 2005.....	35
46 Salaries of Departing and Newly Employed Personnel, 1986 through 2005	36
47 Maximum Class Capacity and Current Enrollment in Physician Assistant Program.....	37
48 Current Enrollment by Gender and Class Year	38
49 Total Student Enrollment of All Classes, 1984 through 2006.....	39

LIST OF TABLES (continued)

50	Student Characteristics, Class 2006-2007	39
51	Number of Enrollees by Region	40
52	First Year P.A. Students Enrolled, 1983 through 2006.....	42
53	First-Year Class Enrollment , 1983 through 2006.....	43
54	Enrollees by Age, Class of 2006-2007	44
55	P.A. Student Enrollment by Age and Region, Class of 2006-2007	45
56	Average Age of Enrollees by Region.....	46
57	Students Enrolled by Ethnicity	46
58	Enrollees by Ethnicity and Consortia Region.....	47
59	Number of Programs with No Minority Enrollment by Consortia Region.....	47
60	Ethnicity of P.A. Students Enrolled, 1983 through 2006.....	49
61	Academic Characteristics of P.A. Students Enrolled in 2006	50
62	Academic Characteristics of Enrollees by Region, Class of 2006-2007.....	50
63	GPA & Mean Number of Months of Health Care Experience by Region, Class of 2006-2007	50
64	Number of Graduates and Students Withdrawn or Decelerated in 2006-2007 by Gender	52
65	Reasons for Student Withdrawal from the Program	52
66	Number Graduated, Withdrawn and Decelerated by Consortia Region.....	53
67	Reasons for Withdrawal by Consortia Region.....	53
68	Number Graduated, Decelerated and Attrition Rates of 2006 Graduates by Age.....	54
69	Number and Attrition Rates of the 2006 Graduates by Ethnicity	55
70	2006 Graduates by Gender, Ethnicity, and Consortia Region.....	56
71	Employment Characteristics of 2006 P.A. Graduates	57
72	Number of 2006 Graduates by State	58
73	Employment Characteristics of 2006 Graduates by Geographic Region	58
74	Employment of Recent Graduates in Primary & Non-Primary Care Medicine, 1985 – 2006.....	59
75	Employment of 2006 Graduates in Primary & Non-Primary Care Med. by Consortia Region.....	59
76	Trends in the Primary Care Medical Specialty Selection of Recent Graduates, 1995 - 2006	60
77	Trends in Non-Primary Care Medicine Specialty Selection of Recent Graduates, 1995 - 2006.....	61
78	Internal Medicine Subspecialties Selected by 2006 Graduates	61
79	Surgical Subspecialties Selected by 2006 Graduates	61
80	Medical Specialties Selected by 2006 Graduates by Consortia Region.....	62
81	Program Directors' Perceptions of Starting Salaries for P.A. Grads by Consortia Region.....	62

LIST OF FIGURES

<u>Figure</u>		<u>Page</u>
1	Geographic Distribution of Programs	5
2	Programs by Year of First Entering Class	6
3	P.A. Programs by Length of Curriculum	7
4	Physician Assistant Programs by Month of Graduation	8
5	Trends in P.A. Program Support: 1984 Through 2006	11
6	Trends in P.A. Student Expenses: 1984 Through 2006.....	14
7	Trends in P.A. Program Salaries: 1985 Through 2006.....	23
8	Program and Medical Director Salaries: 1984 Through 2006.....	31
9	Trends in Personal Turnover: 1986 Through 2005.....	33
10	Personal Turnover By Region: 2005-2006.....	34
11	Trends in Enrollment: 1984 Through 2006.....	40
12	Applicants and Students Enrolled by Region: 2006-2007.....	41
13	Trends of Students Enrolled: 1984 Through 2006.....	41
14	Trends in Total Student Enrollment: 1984 Through 2006.....	44
15	Trends in Enrollee Age: 1983 Through 2006	45
16	Number of Programs vs. Percentage of Minority Enrollment	48
17	Trends in Minority Student Enrollment: 1983 Through 2006.....	48
18	Trends in Health Care Experience of Enrollees: 1983 Through 2006.....	51
19	Trends in the Age of Graduates: 1984 through 2006	54
20	Trends in Student Attrition: 1984 Through 2006.....	56
21	Trends in Minority P.A. Graduates: 1984 Through 2006.....	57
22	Recent Graduate Employment in Primary Care: 1985 Through 2006.....	60
23	Trends in Starting Salary for New Graduates: 1991 Through 2006.....	63

APPENDIX:

Twenty-Third Annual PAEA National Survey for the 2006-2007 Academic Year

TWENTY-THIRD ANNUAL REPORT ON PHYSICIAN ASSISTANT EDUCATIONAL PROGRAMS
IN THE UNITED STATES, 2006-2007

INTRODUCTION

Founded in 1972, the Physician Assistant Education Association (PAEA), formally known as the Association of Physician Assistant Programs (APAP) serves as the national organization representing physician assistant (P.A.) educational programs in the United States. The Association serves as a conduit for communication among P.A. educators by sponsoring meetings, organizing research studies and providing a forum to conduct the business of the membership. Another important role for the Association is to serve as a resource for individuals and organizations interested in the aspects of the physician assistant profession that pertain to the selection and education of the P.A. students and the characteristics of physician assistant programs. In addition, PAEA provides representation to various bodies that help to chart the course of the P.A. profession, including the Accreditation Review Commission on Education for the Physician Assistant, Inc. (ARC-PA) and the National Commission on Certification of Physician Assistants (NCCPA), among others.

As the primary organ for collection and dissemination of data about its member physician assistant educational programs, the Association publishes a web-based "Physician Assistant Programs Directory."¹ The Directory provides a listing and description of PAEA member programs. Each listing provides comprehensive information concerning each program's admission requirements, curriculum, institutional affiliates, credentials awarded and other descriptive data. The Directory also provides a summary of postgraduate educational programs for P.A.'s, information about accreditation and P.A. certification. As of January, 2007, there were 134 physician assistant programs accredited (full or provisional) by the Accreditation Review Commission on Education for the Physician Assistant, Inc.²

In 1984, the process of establishing a national database on P.A. programs was initiated by Denis Oliver, Ph.D., Director of The University of Iowa Physician Assistant Program and then Past-President of the Association. The first national survey was developed and administered in the fall of 1984. The questionnaire requested information on a variety of program "activities" including institutional sponsorship, financial support, program personnel (faculty and support staff), characteristics of applicants and students enrolled, curriculum, student attrition and graduate employment characteristics. The findings from the 1984 survey were published as the First Annual Report on Physician Assistant Educational Programs in the United States, 1984-85 and, to date, a total of twenty-three Annual Reports³⁻²⁵ have been published, including the present Report.

Dr. Oliver retired as author after publication of the eleventh Report. In 1995, the PAEA Board of Directors authorized individuals from the Saint Francis University Department of Physician Assistant Sciences to author future Reports. Data from the annual report has been published in numerous other venues where discussions of the P.A. profession are ongoing. Examples of these publications include the Journal of Medical Education, AAPA News and the Journal of the American Academy of Physician Assistants. Selected data have been published in the Annual Reports to the President and Congress on the States of Health Personnel in the United States and in a publication of the Association of Academic Health Centers.

The data presented in the Report over the years represents responses from greater than 85% of the P.A. programs surveyed. This high rate of response leads the authors to present the findings contained herein to be representative of the physician assistant educational programs in the United States. Given that the basic elements of the annual survey have remained consistent over its twenty-two year history, a significant amount of data has been generated that can be used to depict the "typical" or "average" P.A. educational endeavor. The consistency in collection of data has also provided the ability to detect trends or document changes as they occur over time. Identified trends have been analyzed to generate reports on the following items:

- * Characteristics of AMA-accredited P.A. Programs that have Closed.⁵
- * Characteristics of Graduate-Level P.A. Programs.^{6,9}
- * Analysis of Alien and U.S. Unlicensed Medical Graduates Admitted to P.A. Programs.⁸
- * Analysis of P.A. Program Personnel Turnover.¹⁰⁻²²
- * A Review of Program Characteristics by Sponsoring Institution.³

METHODS

The Survey Instruments

Two questionnaires (surveys #1, #2) were administered. The first survey was a total of seven pages in length, mailed in January 2007, to 134 programs that were identified as accredited from databases maintained by PAEA and the ARC-PA. Survey #1 consisted of three major sections (see the Appendix for a copy of the questionnaires):

- A. General Program Information: Includes date of admission of first class, length of program, consortia membership, sponsoring institution, sources of financial support, student expenses and financial aid and credentials earned.
- B. Program Personnel: Includes characteristics of program faculty and staff, clinical activity of P.A. personnel, and an assessment of program personnel turnover, attrition and recruitment.
- C. Student Information: Includes the number, gender, age, ethnicity, residency, academic and health care experience background of students enrolled.

Survey #2 was three pages in length and requested information on:

- A. Graduate Information: includes information on student attrition and deceleration, characteristics of recent graduates and starting salary for recent graduates.

The Annual Report application was moved “on-line” six years ago, allowing the member programs to enter data directly over the Internet, facilitating the collection and analysis of data. Seventy-five programs (69% of the respondents) submitted their program’s data via this method.

Survey Period and Response Rate

Survey #1 was sent (1/19/2007) to 134 P.A. programs. An initial deadline of February 28, 2007 was established. A total of 109 responses were received for a response rate of 81.3%.

The second survey was included with survey #1 (76 received).

A total of 109 programs returned some portion of survey #1 and/or survey #2, for an overall response rate of 81.3%.

Data Entry and Analysis

In the process of editing each questionnaire, obvious misinterpretations or inconsistencies in the responses to specific items were resolved by telephoning or e-mailing the person completing the survey. A series of contingency checks were made to identify invalid characters or extreme values in any field.

In general, analyses of the data consisted of descriptive statistics on the variables of interest, e.g. arithmetic mean, standard deviation, median, and range of values. Medians were listed on tables when they differed significantly from the mean. T-tests were used to determine levels of statistical significance between groups. Regression equations were developed for program budget and student enrollment as well as various parameters associated with personnel salary and certain variables, which were expected to influence salary, i.e., gender, months of experience, academic credentials and academic rank. Data are not reported when only one person is represented in a category.

Tables and figures presented in this report represent aggregate data from the respondents. Due to missing data and/or unusable answers, the number of respondents to a particular questionnaire item varied. In some cases, data

on nonrespondents was obtained from the PAEA Directory or personal communication with nonrespondent programs, in which case a total of 134 programs were represented.

The "Typical" P.A. Program

The data reported herein represents our best estimate of the population value for the variables involved and were used to describe the characteristics of the "typical" P.A. program. Mean and/or median values were reported for each characteristic examined. In calculating mean values, entries with zero values were usually included while 'missing' values were uniformly excluded. When only partial data were available, the number of respondents was identified.

In some cases, totals reported for a given category may not reflect a simple summation of the subcategories. For example, in the table presenting data on enrollee age (Table 54), one program may report the total number of enrollees, but not report data for any of the age subcategories for enrollees. In such a case, means for each of the age groups are reported based on the programs that provided information. The programs that reported only the total number of enrollees were included in the "total" figure (N=100), but not in the subcategory data (N=93). Thus, the number of responding programs upon which the category or subcategory means were based may differ. In addition to reporting aggregate data for the "typical program," program respondents were also compared on the basis of consortia region.

Analysis of Trends Over Time: 1984-2006

In comparing current data to similar data collected in previous years, trends occurring in various aspects of P.A. educational programs were identified. Specific variables for which comparisons have been made include program budget, student expenses and financial aid, salaries of program personnel, number of applicants and students enrolled, student characteristics (age, gender, ethnicity, health related experience, G.P.A. and attrition) and employment characteristics of program graduates (i.e., rate of employment, medical specialty, type of practice, starting salary).

Additional Copies of this Report

Copies of this Report may be purchased by contacting: Physician Assistant Education Association, 300 N. Washington Street, Suite 505, Alexandria, VA 22314-2544 (703-548-5538).

SECTION I. GENERAL PROGRAM CHARACTERISTICS

Listing of P.A. Programs by Consortia Region

Operational programs are listed by state and PAEA consortium in Table 1. The Northeastern (N=28) region had the largest number of programs, while the Heartland (N=14) had the fewest number of programs. In total, 43 states (including the District of Columbia) currently have an operational P.A. program.

Table 1. Consortium Regions of Operational Physician Assistant Programs

NORTHEASTERN CONSORTIUM (N=28):

Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York

Albany-Hudson Valley	NY Institute of Technology	Touro College - Bay Shores
Brooklyn Hosp/L.I. University	Northeastern University	Touro College - Manhattan
CUNY/Sophie Davis	Pace University	Univ. Medicine and Dent.
D'Youville College	Quinnipiac College	Univ. Of New England
Daemen College	Rochester Institute of Tech.	Wagner College/Staten Isl
Hofstra University	St. Vincent's CMC - Brooklyn	Weill Cornell University
LeMoyne College	Seton Hall University	Yale University
Massachusetts College of Pharmacy	Springfield College	York College/CUNY
MA College Pharmacy - Manchester	SUNY Downstate	
Mercy College	Stony Brook University	

EASTERN CONSORTIUM (N=19):

Maryland, Pennsylvania, District of Columbia

Anne Arundel Comm. College	George Washington Univ.	Philadelphia University
Arcadia University	Howard University	St. Francis University
Chatham University	King's College	Seton Hill University
DeSales University	Lock Haven University	Towson University
Drexel University	Marywood University	Univ. MD – Eastern Shore
Duquesne University	PA College of Technology	
Gannon University	Philadelphia College of Osteo Med	

SOUTHEASTERN CONSORTIUM (N=24):

Alabama, Florida, Georgia, Kentucky, N.Carolina, S. Carolina, Tennessee, Virginia, West Virginia

Alderson-Broaddus College	Jefferson College of Health Science	Shenandoah University
Barry University	Medical College of Georgia	South University
Duke University	Medical Univ South Carolina	Trevecca Nazarene University
East Carolina University	Methodist College	Univ. of Alabama - Birmingham
Eastern VA Medical School	Miami-Dade Community College	University of Florida
Emory University	Mountain State University	University of Kentucky
Harding University	Nova Southeastern University	University of South Alabama
James Madison University	Nova Southeastern - Naples	Wake Forest University

MIDWESTERN CONSORTIUM (N=26):

Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, North Dakota, Ohio, South Dakota, Wisconsin

Augsburg College	Marquette University	Univ. of North Dakota
Butler U/Clarian Health	Midwestern University	University of St. Francis
Central Michigan Univ.	Missouri State Univ.	Univ. of South Dakota
Cook County/Malcolm X	Rosalind Franklin(Finch) Univ	University. of Toledo
Cuyahoga	St. Louis University	University of WI - LaCrosse
DesMoines University	Southern Illinois University	University of WI-Madison
Grand Valley State University	University of Detroit Mercy	Wayne State University
Kettering College	University of Findlay	Western Michigan University
Marietta College	University of Iowa	

HEARTLAND CONSORTIUM (N=14):

Kansas, Louisiana, Nebraska, Oklahoma, Texas

Baylor College of Medicine
Interservice PA Program
Louisiana St. University
Our Lady of the Lake
Texas Tech University
Union College

University of Nebraska
Univ. of North Texas Hlth Sci Cent
University of Oklahoma
University of Texas/Galveston
University of Texas/Pan Am

University of Texas/San Antonio
University of Texas/SW Med Ctr
Wichita State University

WESTERN CONSORTIUM (N=23):

Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington

AZ School of Hlth Sci
Charles Drew Univ
Loma Linda University
Idaho State Univ
Midwestern University
Oregon Hlth Sci Univ
Pacific University
Red Rocks Community College

Riverside Community College
Rocky Mountain College
Samuel Merritt College
San Joaquin Valley College
Stanford University
Touro Univ. – Mare Island
Touro Univ. - Nevada
Univ of California - Davis

University of Colorado
University of New Mexico
University of Saint Francis
Univ of Southern California
University of Utah
University of Washington
Western Univ. of Hlth Science

Nonrespondents to both Surveys; N=25

The above listing is based upon the PAEA Consortium guidelines. Each program responded as to which consortia they belonged. The geographic distribution of the 134 operational P.A. Programs is shown in Figure 1.



Figure 1. Geographic Distribution of Programs

A summary of P.A. programs by sponsoring institution and by highest credential awarded is shown in Table 2 (next page). The majority of P.A. programs were sponsored by either a university (72%) or 4-year college (21%);

seven programs were associated with a two-year college; two programs were sponsored by a hospital and one was sponsored by the armed services. Seventy-seven percent of programs award a masters degree (N=103). Twenty-one programs award a baccalaureate degree upon graduation (16%). The remaining programs (N=10; 7%) awarded either a certificate or an associate degree as the highest credential granted. Over the past five years, thirty baccalaureate programs converted to masters programs, three programs converted from a certificate to a masters degree and two programs converted from an associate to a masters program. Some programs offer a graduate degree on completion of additional courses (e.g., public health, preventive medicine, geriatrics, exercise science). Such programs were not included as “entry-level” masters programs.

Table 2. P.A. Programs by Type of Sponsoring Institution and Credential Awarded*

<u>Type of Sponsoring Institution</u>	<u>N</u>	<u>%</u>	<u>Highest Credential Awarded</u>	<u>N</u>	<u>%</u>
University	96	71.64	Master	103	76.87
4-Year College	28	20.90	Baccalaureate	21	15.67
Community College	7	5.22	Associate	3	2.24
Hospital**	2	1.49	Certificate	7	5.22
Military**	1	0.75			
Total	134	100.00	Total	134	100.00

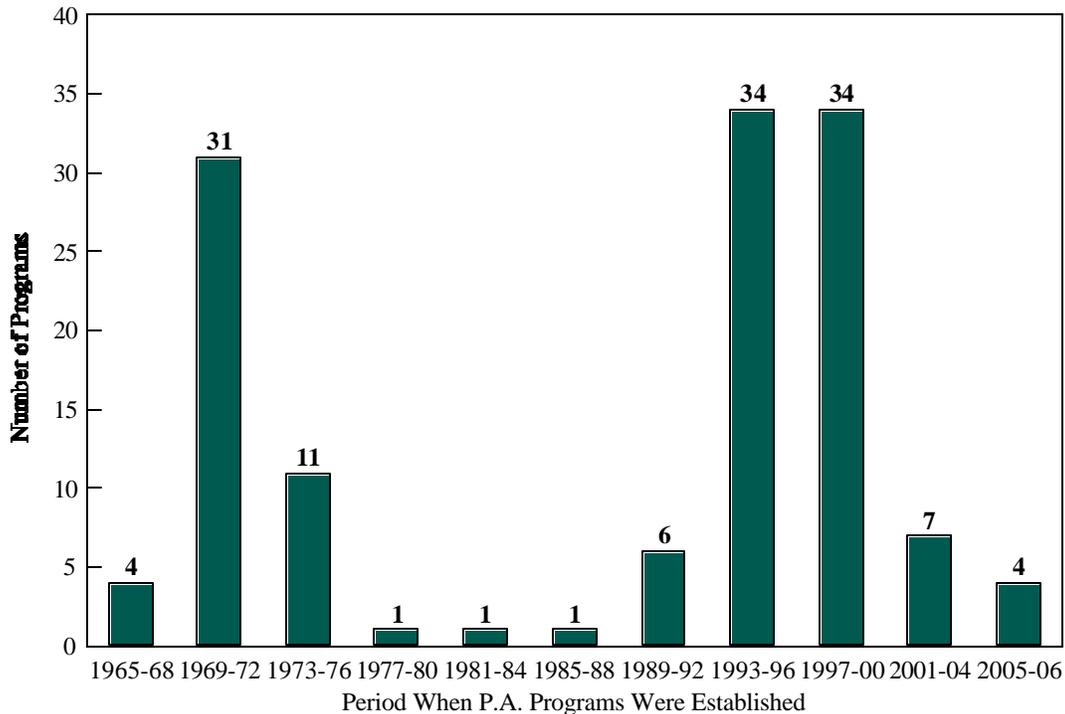
* Nonrespondent information was drawn from PAEA.

** Degrees granted from University/College Affiliates.

Year Current P.A. Programs Were Established, 1965 Through 2006

The distribution of respondent programs by year of their first entering class is shown in Figure 2.

Figure 2. Programs By Year of First Entering Class

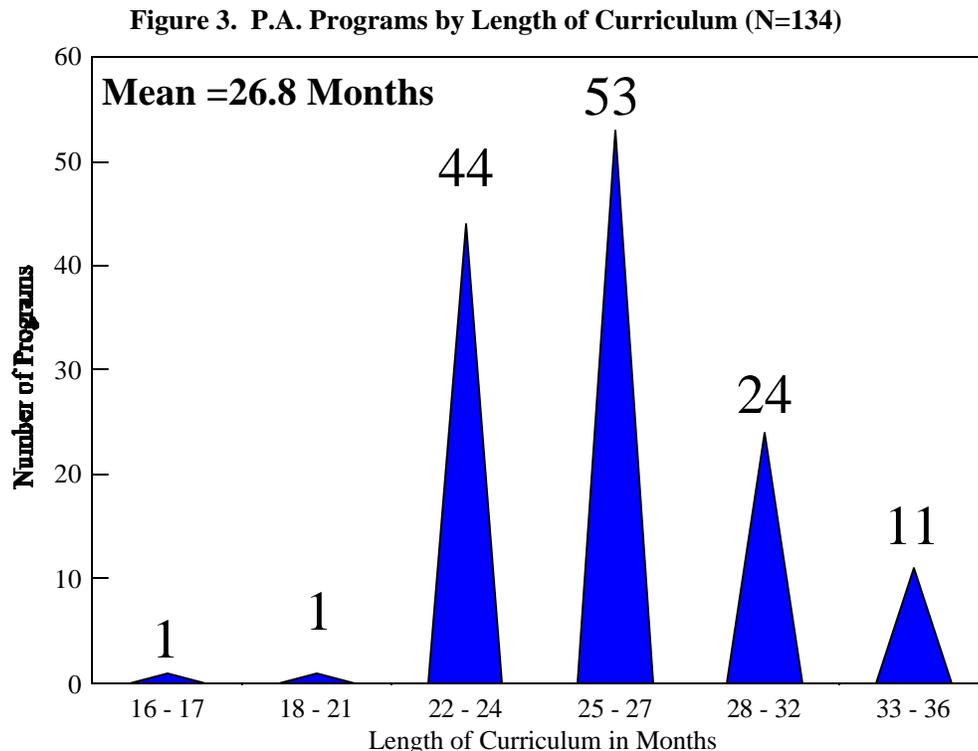


One hundred thirty-four programs are represented, as the data for the nonrespondent programs were obtained from previous Report surveys or from PAEA or ARC-PA. The first P.A. program was established in 1965 at Duke University Medical Center and over the next four years (1965-1968) three additional programs were developed. With the passage by Congress of the Comprehensive Health Manpower Act in 1971, federal training grant support provided the stimulus for the rapid development of the majority of current P.A. programs. Indeed, over the subsequent eight-year period (1969 through 1976), forty-four new programs were established. Over the next twelve years, from 1977 through 1988, only three additional programs were established. In the years 1993-1996, 34 new programs were established and from 1997 to 2000, 34 new programs enrolled students for the first time. From 2001-2004, seven new programs were accredited. Three new programs enrolled students in 2005-2006. One new program enrolled students in 2006-2007.

Current P.A. Programs by Length of Curriculum

Historically, the length of the professional P.A. curriculum has varied across programs. For example, at some institutions, the P.A. program is a 5-year masters curriculum that admits students as freshmen. The first three years of this curriculum involves liberal arts and preparatory science courses followed by two years of professional P.A. studies. In some cases, these programs admit students with advanced standing at the beginning of the professional curriculum, typically two years in length. At the other extreme, graduate-level programs admit students who have completed all liberal arts and preparatory science courses and/or have earned a baccalaureate degree prior to admission. The graduate or master's level curriculum typically includes additional courses and/or experiences in research related activities in addition to the professional curriculum.

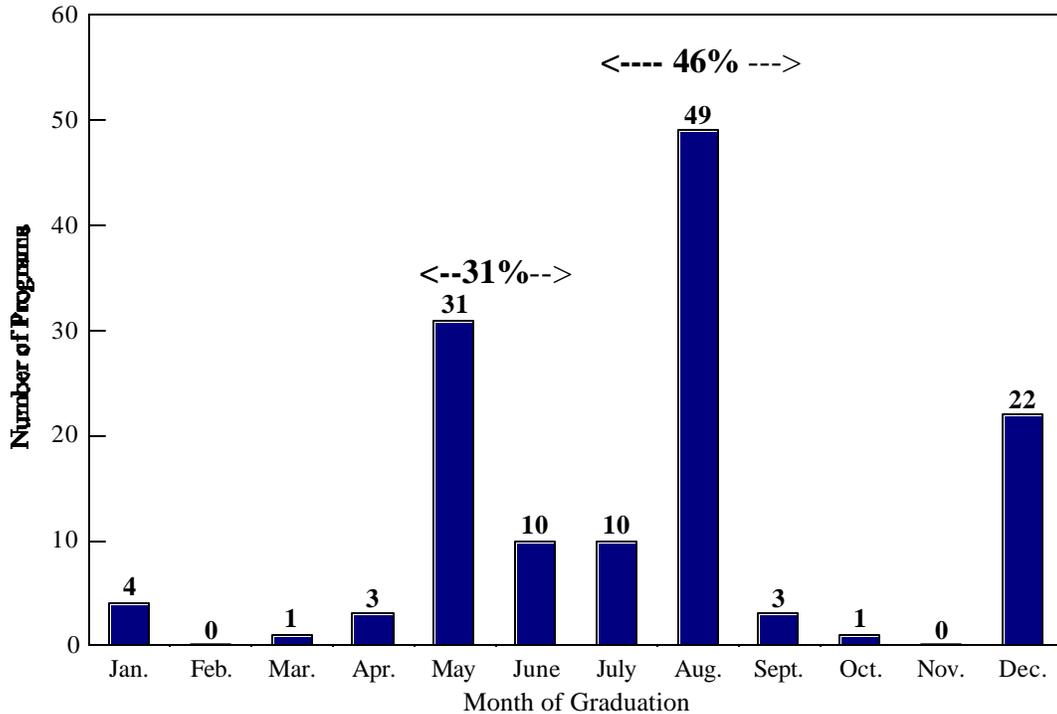
Figure 3 illustrates the diversity across programs relative to the length of the curriculum. The mean length of the curriculum was 26.8 months (N=134) with a range of 16 to 36 months. For convenience, the programs were organized into six groups. The majority of programs were between 25-27 months (N=53) and 22 to 24 months (N=44) in length. The median was 27 months. The length of the curriculum of P.A. programs has increased in the past several years, for example, in 1986 and 1990, the average length of the curriculum was reported as 23.7 and 24.0 months, respectively. The mean of 26.8 months represents an increase of <1.1% from last year. Non-respondent information was obtained from the PAEA Program Directory⁽¹⁾.



Current P.A. Programs by Month of Graduation

The distribution of P.A. programs by month of graduation is shown in Figure 4. Data for nonrespondent programs and those that have been newly established were supplemented by information from the 2006 PAEA Program Directory⁽¹⁾.

Figure 4. P.A. Programs By Months of Graduation (N=134)



Currently, a majority (N=103; 76.9%) of programs graduate students over two periods, (a) between May and June (N=41; 30.6%) and (b) July, August and September (N=62; 46.3%). It should be noted that one program graduates three classes per year.

Financial Characteristics of P.A. Programs

Information concerning the sources of financial support for P.A. programs is shown in Table 3 (next page). Only data from those programs reporting financial support from the sources indicated were used to calculate the sample mean and range for each category. The number of programs reporting no support from a particular source (last column) is also shown. Note, data presented in the latter column excludes those programs that did not respond to a specific item. Over half of the programs (N=49) reported support from more than one source, for example, 22 programs reported two sources, 18 programs three sources, 8 programs four sources and 1 program reported five or more sources of support.

The sources of financial support were classified as either internal or external. Internal support referred to funds available from within the sponsoring institution and/or tuition and fees retained by the program. External support included those funds available from outside the institution, such as federal or state grants, support from public or private foundations, and/or from private industry.

The primary source of internal financial support for the majority (N=86) of programs was the sponsoring institution, providing an average of \$795,539/year/program (S.D.=\$402,988). Ten programs reported that they received no financial support from their sponsoring institution. Twenty-nine respondents indicated that they received substantial support from student tuition and fees paid directly to the program (mean=\$984,282, S.D.=\$1,231,931). Sixty-seven programs did not receive revenue from student tuition or fees.

Table 3. Sources of Financial Support for Physician Assistant Programs

<u>Source of Financial Support</u>	<u>Mean</u>	<u>Median</u>	<u>Range</u>	<u>N</u>	<u># With No Support</u>
<u>Internal</u>					
Sponsoring Institution	\$795,539	\$722,905	\$ 5,500 - 2,247,000	86	10
Tuition and Fees (Retained by Program)	\$984,282	\$350,000	\$ 5,000 - 4,644,000	29	67
<u>External</u>					
Federal Grants	\$134,907	\$110,000	\$ 10,000 - 602,000	30	66
State Grants	\$168,889	\$ 98,000	\$ 25,000 - 500,000	9	87
Foundations	\$ 44,833	\$ 24,000	\$ 2,500 - 108,000	3	93
Private Donation	\$ 25,363	\$ 12,000	\$ 3,000 - 90,000	8	88
Industry	-----	-----	-----	0	96
A.H.E.C. Support	\$ 32,643	\$ 15,000	\$ 1,500 - 95,000	7	89
Other	\$ 34,227	\$ 10,000	\$ 1,000 - 104,000	11	85
Total Program Support	\$1,077,814	\$713,000	\$274,000 - 4,654,000	96	0

External financial support for programs was primarily from federal training grants from the Department of Health and Human Services, Division of Medicine, Bureau of Health Professions. Thirty programs (31% of the respondents to this item) received federal funds during the 2006-2007 fiscal year. The amount of federal support ranged from \$10,000 to \$602,000, averaged \$134,907 per program (S.D.=\$110,000) and accounted for 12.5% of the total budget, lower than the figure (17.9%) reported last year. Sixty-six programs indicated they did not receive federal grant support in 2006-2007. In addition to federal training grants, nine programs indicated they received state grants averaging \$168,889 per year and eleven programs reported financial assistance received from other sources (e.g., consulting, and other grants or awards) averaging \$34,227 per program.

The total annual financial support from all sources for the 96 programs reporting averaged \$1,077,814 per program (median=\$713,000; S.D.=\$738,682). An analysis of the association between total budget and total student enrollment was examined. A correlation was derived, the first using full-time (F.T.) students enrolled ($r = 0.623$; $p < .001$). The results demonstrated a statistically significant relationship between enrollment and program budget.

The following prediction equations were derived from the data using a least squares analysis, estimating program budget and total student enrollment:

(a) Total Program Budget = (51.41) + (11.80 x # F.T. students enrolled) (in \$1,000's)

Thus, using the equation for a program with an enrollment of 90 F.T. students, one would predict a budget of \$1,113,410 per year.

In terms of the reported program budget, the cost of training the average P.A. student for one year of professional training can be roughly estimated by dividing the program budget by the total number of students enrolled. Thus, for the 2006 academic year, the cost for the typical program was approximately \$11,805 to educate each student (mean budget of \$1,077,814 divided by an average enrollment of 91.3 students/program). The estimated cost/student is based on number of students enrolled and reported "program" budget. It should be noted, however, that these figures may exclude (1) overhead costs provided by the institution, (2) faculty, other than "core" program faculty (e.g., basic science faculty) that are supported by their respective departments and (3) preceptors responsible for the clinical training of P.A. students.

Program Budget and Federal Support by Region

A comparison of federal support and total program budget by consortia region is shown in Table 4 (next page). Programs located in the Western region reported the largest total budget (\$1,612,333/program). The most federal

grant support was located in the Southeastern region, averaging \$190,701/program. Programs in the Midwestern region reported the smallest total budget (\$722,551/program). Programs in the Midwestern region also had the least amount of support from federal training grants (\$99,600/program). The proportion of total program budget derived from federal funds was lowest (6.9%) in the Western region, while programs in the Northeastern region derived 15.9% of their total budgets from federal sources.

Table 4. Total Program Budget and Federal Training Grant Support by Consortia Region

Consortia <u>Region</u>	<u>N</u>	<u>Total Budget</u>		<u>Federal Grants</u>		<u>% of Budget</u>	<u>Fed. Support</u>	
		<u>Mean</u>	<u>S.D.</u>	<u>Mean</u>	<u>S.D.</u>		<u>Yes</u>	<u>No</u>
Northeastern	22	\$ 977,932	\$ 500,210	\$155,500	\$ 39,000	15.9%	4	18
Eastern	12	\$ 894,375	\$ 543,732	-----	-----	-----	0	12
Southeastern	19	\$1,329,153	\$ 945,229	\$190,701	\$207,922	14.3%	6	13
Midwestern	17	\$ 722,551	\$ 189,810	\$ 99,600	\$ 49,813	13.8%	5	12
Heartland	11	\$ 863,714	\$ 345,499	\$136,857	\$ 65,428	15.8%	7	4
Western	15	\$1,612,333	\$1,092,798	\$103,125	\$ 70,105	6.9%	8	7
Total	96	\$1,077,814	\$ 713,000	\$134,907	\$110,100	12.5%	30	66

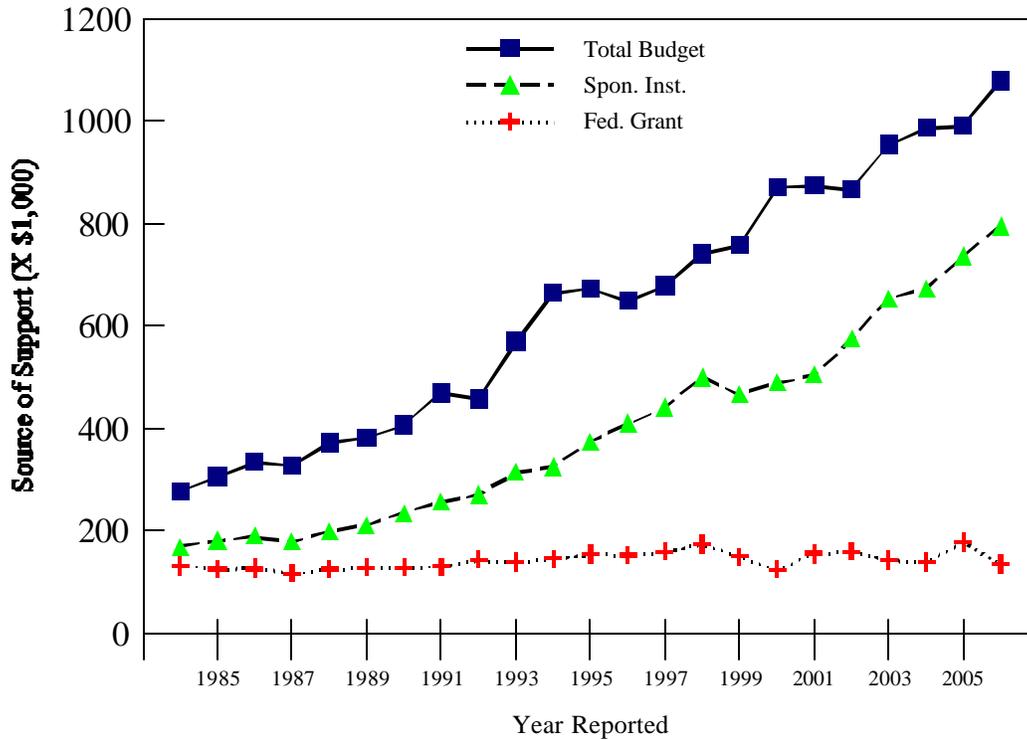
Trends in P.A. program support from 1984 through 2006 are shown in Table 5 and shown graphically in Figure 5 (next page). The total budget column is not a summation of institutional and federal grant support.

Table 5. Trends in Physician Assistant Program Support, 1984 Through 2006

<u>Year</u>	<u>Sponsor. Instit.</u>		<u>Federal Grant</u>		<u>Total Budget</u>		<u>% Budget Fed. Grant</u>	
	<u>N</u>	<u>Mean</u>	<u>N</u>	<u>Mean</u>	<u>N</u>	<u>Mean</u>	<u>N</u>	<u>Mean</u>
1984-85	31	\$169,581	27	\$130,889	37	\$ 276,919	27	35%
1985-86	35	\$181,171	31	\$125,484	38	\$ 305,868	31	41%
1986-87	37	\$189,135	25	\$126,457	42	\$ 334,690	33	39%
1987-88	39	\$178,590	35	\$117,429	45	\$ 328,444	35	38%
1988-89	40	\$200,700	34	\$125,118	44	\$ 371,386	34	34%
1989-90	35	\$211,400	33	\$127,600	44	\$ 381,978	34	33%
1990-91	41	\$235,780	36	\$128,222	47	\$ 409,745	36	31%
1991-92	44	\$257,182	37	\$129,243	48	\$ 470,063	37	28%
1992-93	49	\$270,346	35	\$143,514	55	\$ 457,200	35	31%
1993-94	47	\$315,085	35	\$137,514	55	\$ 568,564	35	24%
1994-95	54	\$324,889	41	\$144,926	58	\$ 664,797	41	22%
1995-96	65	\$373,957	37	\$152,514	71	\$ 673,975	37	23%
1996-97	67	\$410,456	35	\$152,300	77	\$ 648,871	35	22%
1997-98	85	\$441,129	34	\$157,765	90	\$ 679,096	34	22%
1998-99	79	\$501,150	37	\$173,030	90	\$ 740,898	37	23%
1999-00	92	\$466,641	36	\$150,111	103	\$ 756,946	36	20%
2000-01	89	\$487,739	31	\$123,055	99	\$ 871,824	31	14%
2001-02	91	\$504,324	33	\$154,834	101	\$ 873,977	33	18%
2002-03	89	\$574,416	38	\$159,334	103	\$ 866,612	38	18%
2003-04	89	\$654,339	41	\$141,762	103	\$ 954,422	41	15%
2004-05	84	\$672,444	36	\$138,982	96	\$ 986,987	36	14%
2005-06	88	\$735,508	37	\$177,408	100	\$ 990,527	37	18%
2006-07	86	\$795,539	30	\$134,907	96	\$1,077,814	30	13%

The total budget for 2006 increased by \$87,287 from the previous year. The level of training grants accounted for 13% of the total budget. Overall, the total program budget increased by an average of 6.6% annually and the program support from the sponsoring institution increased by an average of 7.4% annually from 1984 to 2006. Federal support decreased by 24% from 2005. The proportion of the total budget from federal training grants has decreased from 41% in 1985 to 13% in 2006. As shown in Figure 5 there has been a sustained increase in both the total program budget and institutional support since 1984. Since 1984, total program budget increased by over 289% while support from the sponsoring institution increased 369%.

Figure 5. Trends in P.A. Program Support: 1984 Through 2006



Student Educational Expenses

For the class entering in 2006, respondents estimated student tuition and educational expenses for the entire length of the program. These results are shown in Table 6. No information was requested concerning living expenses.

Table 6. Tuition and Expenses of P.A. Students

<u>Tuition for Entire Program</u>	<u>Mean</u>	<u>Range</u>	<u>N</u>	<u>Mean/Month/Program</u>
Resident Student	\$44,637	\$ 10,200- 99,942	97	\$1,660
Nonresident Student	\$52,225	\$ 18,300- 99,942	90	\$1,946
<u>Books, Fees, and Equipment</u>	\$ 6,273	\$ 400- 48,000	96	\$ 239
<u>Total Student Costs: (Tuition, Books, Fees, Equipment)</u>				
Resident Student	\$51,019	\$12,000-104,942	95	\$1,907
Nonresident Student	\$58,671	\$23,200-104,942	89	\$2,192

It should be noted that for the first five Annual Reports, tuition was reported for the student's ENTIRE professional program, for the next eight Annual Reports tuition was reported for the current academic year, however, with the 14th Annual Report, tuition and other educational expenses (e.g., books, fees, equipment) were again reported for the entire professional program.

On average, there was a \$7,897 difference between resident and nonresident tuition among the 90 programs responding. Data are also expressed as the mean cost per student per month. The results of this computation are shown in the right column of Table 6, and indicate that the typical resident student paid an average tuition of \$1,660 per month while the nonresident paid \$1,946 per month, a 17% difference.

Expenses associated with books, equipment and fees averaged \$6,273 per student for their entire professional training. These expenditures represented approximately 12.3% and 10.7% of the total educational expenses for resident and nonresident students, respectively. The total expenses incurred by the typical P.A. student for their entire P.A. education (includes tuition, books, equipment, and fees) averaged \$51,019 for residents and \$58,671 for nonresidents. The average total cost per month was \$1,907 for residents and \$2,192 for nonresident students.

As shown in Table 7, the majority of students (88.7%) received financial aid, which averaged \$26,685 per student per year and accounted for 117% of the costs of tuition, fees, books, and equipment (\$22,882) for the typical resident student. Using these values, one can estimate that the typical resident P.A. student would be indebted approximately \$53,370 (2 X \$26,685) at the conclusion of their professional education.

Table 7. Financial Aid Support Provided P.A. Students

<u>Financial Aid Characteristic</u>	<u>Mean</u>	<u>Range</u>	<u>Number</u>
% Receiving Financial Aid	88.7%	20-100%	89
Amount of Aid Received/Year	\$26,685	\$1,500-80,000	76

Student Expenses by Consortia Region

Tuition (for the entire curriculum) and total costs for P.A. students during the 2006-2007 academic year are shown by consortia region in Table 8. The average resident tuition and total expenses incurred by P.A. students varied extensively across consortia region. Resident tuition was highest for students enrolled in programs located in the Northeastern region (\$51,203/curriculum) and lowest for programs located in the Heartland region (\$26,171/curriculum). Nonresident tuition varied less across regions with a difference of approximately \$12,744 between the highest and lowest values. Total student expenses per month for residents were highest among programs in the Northeastern region. Total student expenses per month for nonresidents were highest in the Western region. Total resident and nonresident student expenses were lowest in the Heartland region. The proportion of students receiving financial aid varied from 86.5% in the Heartland region to 90.6% in the Western region.

Table 8. Expenses of P.A. Students by Consortia Region

<u>Consortia Region</u>	<u>N</u>	<u>Mean Tuition</u>		<u>Total Costs/Month</u>		<u>% Receiving Finan.Aid</u>
		<u>Resident</u>	<u>Nonresident</u>	<u>Resident</u>	<u>Nonresident</u>	
Northeastern	22	\$51,203	\$54,108	\$2,119	\$2,219	86.8%
Eastern	12	\$48,573	\$51,219	\$2,067	\$2,173	88.7%
Southeastern	19	\$42,068	\$52,561	\$1,854	\$2,259	90.1%
Midwestern	18	\$43,886	\$53,851	\$1,905	\$2,202	89.0%
Heartland	9	\$26,171	\$42,415	\$1,114	\$1,667	86.5%
Western	16	\$46,493	\$55,159	\$2,015	\$2,386	90.6%
Total	96	\$44,637	\$52,225	\$1,660	\$1,946	88.7%

Trends in P.A. Student Expenses

Comparisons between tuition and student expenses, and the proportion of students receiving financial aid from 1984 through 2006, are shown in Table 9 and Figure 6 (next page).

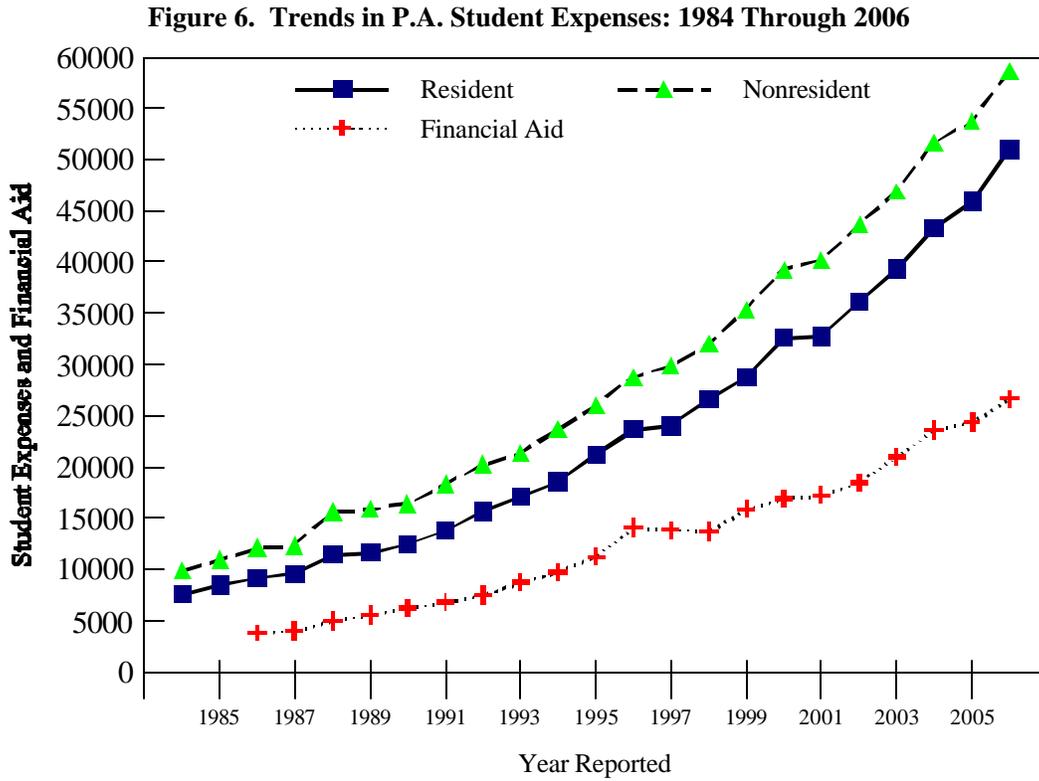
Table 9. Trends in P.A. Student Expenses, 1984 Through 2006

Academic <u>Year</u>	<u>Mean Tuition</u>				<u>Total Expenses</u>				<u>% With</u>		<u>Fin. Aid Received</u>
	<u>Resident</u>		<u>Nonresident</u>		<u>Resident</u>		<u>Nonresident</u>		<u>Fin. Aid</u>	<u>%</u>	
	<u>N</u>	<u>Mean</u>	<u>N</u>	<u>Mean</u>	<u>N</u>	<u>Mean</u>	<u>N</u>	<u>Mean</u>	<u>N</u>	<u>%</u>	
1984-1985	37	\$ 6,378	36	\$ 8,986	35	\$ 7,669	34	\$ 9,962	33	65%	N/A
1985-1986	40	\$ 7,098	40	\$ 9,565	40	\$ 8,588	40	\$11,055	40	65%	N/A
1986-1987	46	\$ 7,626	43	\$10,451	45	\$ 9,247	42	\$12,155	39	63%	\$3,866
1987-1988	47	\$ 8,012	47	\$10,775	47	\$ 9,643	47	\$12,494	43	63%	\$4,060
1988-1989	47	\$ 9,472	47	\$13,660	47	\$11,485	47	\$15,681	43	67%	\$5,086
1989-1990	47	\$ 9,978	47	\$14,174	47	\$11,706	47	\$15,902	43	69%	\$5,663
1990-1991	47	\$10,620	47	\$14,614	47	\$12,495	46	\$16,511	42	71%	\$6,268
1991-1992	48	\$11,714	47	\$16,240	48	\$13,890	47	\$18,440	45	71%	\$6,860
1992-1993	55	\$13,092	55	\$17,772	55	\$15,694	55	\$20,375	51	71%	\$7,558
1993-1994	55	\$14,470	55	\$18,774	55	\$17,153	55	\$21,457	49	71%	\$8,755
1994-1995	59	\$16,030	59	\$21,106	59	\$18,676	59	\$23,752	53	77%	\$9,846
1995-1996	69	\$17,872	69	\$22,702	69	\$21,308	69	\$26,132	64	79%	\$11,251
1996-1997	76	\$20,132	76	\$25,088	76	\$23,695	76	\$28,775	68	79%	\$14,114
1997-1998	91	\$20,296	91	\$26,228	91	\$24,057	91	\$29,989	84	85%	\$13,890
1998-1999	92	\$22,428	92	\$27,922	92	\$26,653	92	\$32,147	83	83%	\$13,808
1999-2000	106	\$24,407	105	\$31,001	106	\$28,840	105	\$35,434	94	84%	\$15,909
2000-2001	101	\$28,048	101	\$34,662	101	\$32,684	101	\$39,298	88	86%	\$16,930
2001-2002	105	\$28,036	105	\$35,536	104	\$32,810	104	\$40,310	94	88%	\$17,315
2002-2003	96	\$30,949	97	\$38,423	96	\$36,154	97	\$43,628	93	86%	\$18,477
2003-2004	108	\$34,167	108	\$41,723	107	\$39,360	107	\$46,884	97	89%	\$21,004
2004-2005	105	\$37,823	105	\$46,344	105	\$43,309	105	\$51,730	93	88%	\$23,663
2005-2006	103	\$40,697	102	\$48,549	103	\$45,910	101	\$53,843	96	89%	\$24,454
2006-2007	97	\$44,637	90	\$52,225	95	\$51,019	89	\$58,671	89	89%	\$26,685

Tuition has increased 600% and 481% over the past twenty-three years for resident and nonresident students, respectively, an average of 9.3% and 8.4% per year, respectively. Similarly, total student expenses (which includes tuition, books, equipment, and fees over the entire program) increased by 565% and 489% over the twenty-three year period for resident and nonresident students, respectively.

The proportion of students receiving financial aid averaged 78% from 1984 through 2006 and has varied within a narrow range, i.e., 63% to 89%, over time. It should be noted that the data shown in Table 9 and Figure 6 represents the tuition and costs expended by the typical student for the entire professional program and does not include pre-program academic preparation or living expenses. Beginning with the 1986 annual survey, respondents were asked to estimate the amount of financial aid received per student.

Inspection of Figure 6 illustrates that financial aid received by the typical student increased by approximately 590% since 1986; total expenses increased by 452% for resident and 383% for nonresident students during that same period.



SECTION II. PROGRAM PERSONNEL

Classification of Physician Assistant Program Personnel

In 1984, the first PAEA survey yielded information on the "core" personnel employed by P.A. programs. Core personnel were defined as those who devoted at least 50% of their time directly to program-related activities. These findings indicated that a total of 258 individuals were employed by the 36 programs responding (7.2 individuals/program and 6.0 FTE's/program). At that time, the personnel were classified into four categories based on their position: administrative (106; 41%), clerical (45; 18%), educational (96; 37%), and research (11; 4%). The total number of employees per program ranged from 3 to 13 with an average of one employee for every 7.7 students enrolled in the typical program.

Program personnel (excluding clerical persons) were further classified into two groups, those that were credentialed as a P.A. and those that were not (herein referred to as non-P.A.'s). The reader is referred to previous Annual Reports for a more detailed description of these personnel for each year. Based on the personnel data over the past twenty-three years, it has been shown that there are an average of 3.5 to 4.7 physician assistants (P.A.'s) employed per program. This figure excludes program directors, many of whom were P.A.'s.

For purposes of our present personnel analysis, program staff and faculty were divided into three groups: (a) program directors, (b) medical directors, (c) "program personnel" which included P.A.'s (excluding program directors) and non-P.A.'s (excluding program directors). The P.A. and non-P.A. groups were further subdivided into four categories (I, II, III, and IV) on the basis of their position titles as summarized in Table 11. Category I includes program personnel whose responsibilities were generally associated with the first-year curriculum, typically including courses in the basic and behavioral sciences and/or the curriculum associated with

Table 10. Classification of Program Personnel by Category

<u>Category</u>	<u>Typical Position Titles</u>	
I	Lecturer/Instructor Educ./Acad. Coordinator	Educational Specialist Course Coordinator
II	Clinical Coordinator Clinical Instructor	Clinical Skills Coordinator
III	Assoc. or Assist. Director Program Assistant	Executive Assistant Co-Director
IV	Admin. Secretary/Asst. Office Supervisor	Secretary Data Manager

history/physical examination skills as well as components of introduction to clinical medicine courses. Category II personnel were those involved in the second year or clinical rotation phase of the educational program. These individuals generally assumed clinical teaching or evaluation responsibilities and/or coordinated the students' clinical training assignments. Category III describes those individuals who had primarily administrative-level positions, but excluded those that were program or medical directors. Category IV included personnel who were mainly classified as support staff. Category IV personnel were not considered faculty.

It should be appreciated that program faculty and staff often share responsibilities across teaching, administrative and research activities. Despite this limitation, this classification is a useful way to describe and analyze core program personnel. The majority of the tables that follow in this section list Category IV personnel information, however it is not included in the total/mean columns. Please refer to each individual table to determine if it is included or not.

Number of P.A. and Non-P.A. Program Personnel by Category

The number of P.A. and non-P.A. program personnel by category is shown in Table 11. It should be noted that program directors are not included in Tables 11 through 30, unless specifically indicated. Across all four categories, there were 755 (190 Category IV) personnel reported by survey respondents (N=99; 7.6 per program), 440 P.A.'s and 315 non-P.A.'s. Ninety-seven programs indicated that they had at least one Category I - III P.A. (mean of 4.5/program) and 67 programs indicated that individuals without a P.A. credential were employed in at least one of the I - III categories (mean of 1.9/program).

Table 11. P.A. and Non-P.A. Program Personnel by Category

<u>Characteristic</u>	<u>Personnel Category</u>				<u>Categories</u>	
	<u>I</u>	<u>II</u>	<u>III</u>	<u>IV</u>	<u>I – III</u>	
<u>Physician Assistants</u>						
Total Number	265	150	25	0	440	440
# of Programs*	84	86	20	0	97	99
Mean #/Program	3.2	1.7	1.3	0.0	4.5**	4.4***
<u>Non-Physician Assistants</u>						
Total Number	60	15	50	190	125	125
# of Programs*	44	11	31	76	67	99
Mean #/Program	1.4	1.4	1.6	2.5	1.9**	1.3***

- * Number of programs reporting at least one P.A. or non-P.A. in a category.
- ** Mean is based on number of programs reporting personnel in a category.
- *** Mean based on all (N=99) programs.

The majority of program personnel in Categories I - III were credentialed as P.A.'s (78%) as compared to non-P.A.'s (22%). Across all programs (N=99), the mean per program is 4.4 P.A.'s and 1.3 non-P.A.'s.

Number of P.A. Program Personnel by Region

The total number of personnel (P.A. and non-P.A. personnel) associated with P.A. programs by consortia region and category is shown in Table 12. Physician assistant programs located in the Eastern region of the United States employed the greatest number of Category I - III P.A.'s and programs located in the Western region employed the largest number of non-P.A.'s per program.

Table 12. P.A. and Non-P.A. Program Personnel by Category and Region

<u>Consortia Region</u>	<u>N</u>	<u>Personnel Category</u>				<u>Total</u>	<u>Mean per Program (Cat I-III)</u>
		<u>I</u>	<u>II</u>	<u>III</u>	<u>IV</u>		
Northeastern	20	32 (14)	38 (3)	3 (6)	0 (36)	73 (59)	3.7/(1.2)
Eastern	12	43 (5)	22 (1)	5 (0)	0 (25)	70 (31)	5.8/(0.5)
Southeastern	21	59 (11)	31 (2)	6 (17)	0 (41)	96 (71)	4.6/(1.4)
Midwestern	19	44 (11)	19 (1)	1 (7)	0 (24)	64 (43)	3.4/(1.0)
Heartland	10	27 (11)	19 (2)	6 (3)	0 (22)	52 (38)	5.2/(1.6)
Western	<u>17</u>	<u>60 (8)</u>	<u>21 (6)</u>	<u>4 (17)</u>	<u>0 (42)</u>	<u>85 (73)</u>	<u>5.0/(1.8)</u>
Total	99	265 (60)	150 (15)	25 (50)	0 (190)	440 (315)	4.4/(1.3)

* # of non-P.A. personnel are in parentheses.

Programs located in the Midwestern region had the fewest number of P.A.'s associated with the program (mean of 3.4/program). Programs in the Eastern region employed the least number of Category I-III non-P.A.'s (0.5/program). Programs in the Western region employed the greatest number of Category IV personnel per program (2.5/program), while programs in the Midwestern region employed the least (1.3/program).

General Characteristics of P.A.'s and Non-P.A.'s Employed by Programs

The general characteristics of physician assistant personnel employed by P.A. programs, by category, excluding non-P.A. program personnel, are shown in Table 13. Across all categories, P.A.'s devoted an average of 93% of their time to the program; the majority was classified as full-time employees.

Table 13. General Characteristics of Physician Assistant Personnel

<u>Characteristic</u>	<u>Personnel Category</u>			<u>Total</u> N = 434
	<u>I</u> N = 261*	<u>II</u> N = 149	<u>III</u> N = 24	
<u>Mean % Time</u>	92.5%	94.0%	93.8%	93.1%
<u>Annual Salary</u>	N = 238	N = 139	N = 25	N = 402
Mean**	\$74,998	\$75,314	\$86,469	\$75,821
Range	\$29,556-\$133,600	\$32,250-\$105,400	\$67,053-\$129,012	\$29,556-\$133,600
<u>Months in Position</u>	N = 262	N = 147	N = 22	N = 431
Mean	60.3	60.6	91.8	62.0
Median	42.0	36.0	62.0	41.0
Range	1-336	3-324	5-305	1-336

* Number of P.A.'s in category.

** Salaries adjusted to 1 FTE

The mean annual salary across all categories was \$75,821 with a range from \$29,556 to \$133,600. On average, individuals had been in their position for 62 months (range 1-336 months). There was some difference in mean salary across categories, ranging from \$74,998 for Category I to \$86,469 for Category III, a 15.3% increase. P.A.'s in Category III had held their positions for the longest period of time, averaging 91.8 months, while the majority of P.A.'s in Category I had been associated with the program for the least amount of time (60.3 months).

Clinical Activity of Physician Assistant Personnel

General characteristics of the clinical activity of P.A. personnel are shown in Table 14 (next page). Note, P.A. credentialed program directors were **also** included in this analysis, however medical directors **were not**. The following information was requested of respondents: the number of personnel that were clinically active, mean number of hours worked per week, number that were reimbursed for their clinical services, the amount paid for said services (mean hourly wage) and whether their clinical earnings were included in the salary reported in the personnel table. Based on the data reported, the amount and percent of annual salary derived from clinical service was calculated. Lastly, for those personnel who received earnings through their clinical service in addition to their regular salary, a gross salary (combining program and clinical sources) was calculated. Over half (58%) of

the program personnel that were credentialed as P.A.'s had clinical responsibilities, in addition to their program activities. This proportion varied across the three categories and was greatest for those in Category I (66%). Forty-three percent of program directors (P.A.'s) also had clinical responsibilities.

Table 14. General Characteristics of Clinically Active Physician Assistant Personnel

Characteristic	P.A. Personnel Category			Program Directors N=89	Total N=523
	I N=261	II N=149	III N=24		
Clinically Active P.A.'s	171(66%)	81(54%)	12(50%)	38(43%)	302(58%)
<u>Hrs Worked/Week</u>					
Mean	10.4	10.6	7.2	7.4	10.0
(N)	(169)	(79)	(12)	(35)	295
Range	0.5-42	2-40	4-8	0.5-30	0.5-42
<u>Number (%) Paid for Services</u>					
	142(83%)	74(91%)	8(67%)	31(82%)	255(84%)
<u>Mean Wage/Hour</u>					
	\$42.77	\$42.12	\$36.42	\$42.72	\$42.56
(N)	(132)	(61)	(8)	(29)	(230)
<u>Annual Amount*</u>					
	\$22,281	\$20,662	\$13,120	\$17,658	\$20,934
<u>Adjust. Salary**</u>					
	\$95,677	\$96,014	\$92,170	\$112,422	\$97,973
<u>% Salary From Clinical Earnings</u>					
	21.0%	21.2%	13.0%	15.4%	20.0%

* Estimated at 48 weeks per year.

** Base Salary + Clinical Earnings for those clinically active.

On average, P.A.'s spent 10.0 hours per week providing patient care; program directors who were P.A.'s spent an average of 7.4 hours per week. The range in time spent was very broad, from one-half hour per week to 42 hours per week. Eighty-four percent of P.A. personnel received additional compensation for their clinical services. The mean hourly wage averaged \$42.56/hour and varied from \$36.42 for Category III to \$42.77 per hour for Category I.

Given the mean number of hours worked per week, the average hourly wage and, assuming an average of 48 weeks were worked per year, the annual earnings from patient care services of the P.A.'s with clinical responsibility was estimated. On average, these individuals earned \$20,934 from their clinical activity. Category III personnel had the lowest additional income (\$13,120) and those in Category I had the highest (\$22,281).

An "adjusted" annual income (base salary + clinical earnings) was determined for those indicating they received earnings from both sources. On average, there was a 28% increase over base salary for those personnel that were clinically active. And, clinical earnings accounted for almost one-fifth of the personnel salary. In subsequent tables, salary figures will not include clinical earnings.

General characteristics of non-P.A. credentialed personnel by category is shown in Table 15 (next page). Across categories, the typical non-P.A. in Categories I - III devoted 95% of their time to the program; the majority were classified as full-time employees.

Table 15. General Characteristics of Non-P.A. Personnel

<u>Characteristic</u>	<u>Personnel Category</u>				<u>Total (Cat. I - III)</u>
	<u>I</u>	<u>II</u>	<u>III</u>	<u>IV</u>	
	<u>N = 60</u>	<u>N = 15</u>	<u>N = 50</u>	<u>N = 181</u>	<u>N = 125</u>
<u>Mean % Time</u>	94.9%	93.3%	95.6%	95.4%	95.0%
<u>Annual Salary*</u>	<u>N = 47</u>	<u>N = 14</u>	<u>N = 46</u>	<u>N = 172</u>	<u>N = 107</u>
<u>Mean</u>	\$73,197	\$45,635	\$42,649	\$35,311	\$56,722
<u>Median</u>	\$70,000	\$44,000	\$35,211	\$33,225	\$55,407
<u>Range</u>	\$41,058- \$111,456	\$24,750- \$78,100	\$10,300- \$100,000	\$14,000 - \$70,932	\$10,300- \$100,000
<u>Months in Position</u>	<u>N = 60</u>	<u>N = 15</u>	<u>N = 48</u>	<u>N = 181</u>	<u>N = 123</u>
<u>Mean</u>	71.5	41.7	91.4	71.5	75.6
<u>Median</u>	42.5	22.0	62.0	39.0	46.0
<u>Range</u>	1 – 372	2 – 156	9 - 798	2 – 805	1 – 798

* Salaries adjusted to 1 FTE

The mean salary for non-P.A.'s across Categories I - III was \$56,722, ranging from \$10,300 to \$100,000. On average, these individuals had been employed 75.6 months (median of 46, range of 1-798 months). Non-P.A.'s in Category I earned the highest average salary (\$73,797). Non-P.A.'s in Category III had the lowest average salary (\$42,649). Based on the median, Category II non-P.A.'s had been associated with the program for the shortest period of time, while Category III non-P.A.'s, on average, had been employed almost three times as long. Overall, non-P.A.'s had a lower average annual salary than did personnel who were P.A.'s. Category IV personnel had a mean salary of \$35,311 with a broad range of \$14,000 to \$70,932. Category IV personnel had been in their position an average of 71.5 months (median: 39 months).

Characteristics of program personnel in Categories I - III, by ethnicity and gender, are shown in Table 16. It should be noted that data on P.A. and non-P.A. program personnel were combined for the analyses in Tables 16 and 20.

Table 16. Salary and Months in Position of Category I - III P.A. and Non-P.A. Personnel by Ethnicity and Gender

<u>Ethnicity</u>	<u>Number of Personnel</u>			<u>Mean Annual Salary</u>		<u>Mean Months in Position</u>	
	<u>Male</u>	<u>Female</u>	<u>Total</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
White/Non-Hisp.	177	295	472	\$78,234	\$69,393	67.9	65.0
Black/African-Amer.	11	17	28	\$69,999	\$64,535	41.3	74.0
Latin/Hisp/Mex. Am.	9	11	20	\$77,950	\$65,508	46.3	47.4
Asian	6	8	14	\$75,617	\$64,452	48.0	129.6
Asian Subpopulation	0	3	3	-----	\$45,732	-----	18.0
Native Haw./Other PI	0	3	3	-----	\$76,348	-----	28.0
Amer. Ind./Alaskan	0	2	2	-----	-----	-----	21.0
Other	<u>1</u>	<u>2</u>	<u>3</u>	-----	-----	-----	<u>54.5</u>
Total	204	341	545	\$77,304	\$68,804	63.2	65.5

Proportionately, there were more women (63%) among the P.A. and non-P.A. personnel; 63% of the white (295/472) and 63% of the non-white personnel (46/73) were women. In total, 73 P.A. program staff and/or faculty from 41 programs were identified as members of an ethnic minority (28 Black/African-American, 20 Latino/Hispanic, fourteen Asian, three Asian Subpopulation, three Native Hawaiian/Other Pacific Islander, two

American Indian/Alaskan Native and three Other). This constitutes 13.4% (73/545) of the total number of faculty and staff and 41% of the programs responding. On average, males earned higher annual salaries than their female counterparts. Females were employed longer in their current position than males.

Characteristics of program personnel in Category IV, by ethnicity and gender, are shown in Table 17. Category IV personnel consisted mainly of females (89.4%). Fifty-three (30%) Category IV P.A. program staff from 31 programs were identified as members of an ethnic minority. Females were employed longer in their current position than males, 75.4 and 40.6 months, respectively.

Table 17. Salary and Months in Position of Category IV Personnel by Ethnicity and Gender

Ethnicity	Number of Personnel			Mean Annual Salary		Mean Months in Position	
	Male	Female	Total	Male	Female	Male	Female
White/Non-Hisp.	13	114	127	\$38,094	\$34,152	45.5	83.0
Black/African-Amer.	1	20	21	-----	\$38,440	-----	80.3
Latin/Hisp/Mex. Am.	5	16	21	\$50,000	\$34,875	37.3	46.4
Asian	0	6	6	-----	\$40,214	-----	35.0
Asian Subpopulation	0	1	1	-----	-----	-----	-----
Native Haw./Other PI	0	0	0	-----	-----	-----	-----
Amer. Ind./Alaskan	0	3	3	-----	\$30,808	-----	39.7
Total	19	160	179	\$40,608	\$34,750	40.6	75.4

The relationship between salary, percent time, and months in position for P.A. and non-P.A. personnel by gender is shown in Table 18.

Table 18. Analysis of Salary, Percent Time and Months in Position of P.A. and Non-P.A. Personnel by Gender

Categories	Mean Annual Salary				Mean % Time				Mean Months in Position			
	Male	N	Female	N	Male	N	Female	N	Male	N	Female	N
<u>Cat. I</u>												
P.A.	\$77,196	93	\$73,589	145	95.2	105	90.6	156	58.6	105	61.5	157
Non-P.A.	\$77,955	26	\$68,649	21	94.9	32	94.9	28	59.1	32	85.8	28
<u>Cat. II</u>												
P.A.	\$78,611	44	\$73,819	94	97.6	49	92.1	99	67.0	47	56.4	99
Non-P.A.	\$72,883	2	\$41,094	2	83.3	3	95.8	12	16.7	3	48.0	12
<u>Cat. III</u>												
P.A.	\$84,886	7	\$87,085	18	100.0	7	91.2	17	61.7	6	103.1	16
Non-P.A.	\$61,927	8	\$39,129	36	92.2	9	96.3	40	145.0	8	80.8	38
<u>Cat. IV</u>												
Non-P.A.	\$40,608	15	\$34,750	156	97.5	20	95.1	166	40.6	19	75.4	161
<u>Cat. I - III</u>												
P.A.	\$78,002	144	\$74,619	257	96.1	161	91.2	272	61.2	158	62.1	272
Non-P.A.	\$74,112	36	\$48,452	69	93.5	44	95.6	79	72.1	43	77.5	78

On average, male personnel earned higher annual salaries than female personnel. For Categories I - III, non-P.A. personnel had been in their positions substantially longer than P.A. personnel.

Personnel by Region: Salary, Months in Position and Ethnicity

Data regarding salary and time in position for P.A. and non-P.A. personnel by consortia region is presented in Table 19. P.A.'s associated with programs located in the Heartland region reported the highest annual salaries. The lowest mean P.A. salary was in the Eastern region. Non-P.A.'s in the Eastern region had the highest salaries, while those in the Southeastern region had the lowest salaries. P.A.'s salaries were higher than Non-P.A.'s in each region except the Eastern. Non-P.A.'s were employed for more months. There was a statistically significant correlation ($r = 0.25$; $p < .01$) between time in position and salary.

Table 19. Program Personnel: Salary and Time in Position by Region

Consortia Region	Mean Salary: Categories I - III				Months in Position	
	<u>P.A.</u>	<u>N</u>	<u>Non-P.A.</u>	<u>N</u>	<u>P.A.</u>	<u>Non-P.A.</u>
Northeastern	\$75,269	64	\$59,138	15	61.0	65.7
Eastern	\$71,199	63	\$81,384	6	57.1	39.2
Southeastern	\$78,661	94	\$50,422	29	51.7	60.0
Midwestern	\$72,600	62	\$51,400	17	67.6	48.2
Heartland	\$82,647	40	\$63,835	10	60.7	135.5
Western	<u>\$75,824</u>	<u>79</u>	<u>\$57,316</u>	<u>31</u>	<u>62.0</u>	<u>92.1</u>
Total	\$75,821	402	\$56,722	108	62.0	75.6

The salaries of Category I - III P.A. program personnel (P.A.'s and non-P.A.'s) by ethnicity and consortia region are shown in Table 20. Mean salaries of Latino/Hispanic personnel were higher than their White counterparts in the Northeastern and Western regions. Latino/Hispanic personnel had higher average salaries than Black/African-American in all regions where comparisons could be made.

Table 20. Analysis of Program Personnel by Consortia Region and Ethnicity
Category I – III

Consortia Region	Mean Annual Salary					
	<u>White</u>	<u>N</u>	<u>Black/ African-Amer</u>	<u>N</u>	<u>Lat/Hisp</u>	<u>N</u>
Northeastern	\$72,651	68	\$78,725	5	\$81,151	2
Eastern	\$72,084	59	-----	1	-----	0
Southeastern	\$72,066	99	\$65,494	12	\$66,214	7
Midwestern	\$68,149	69	\$57,964	3	\$58,000	2
Heartland	\$79,424	44	-----	0	\$69,500	2
Western	<u>\$72,690</u>	<u>84</u>	<u>\$61,821</u>	<u>5</u>	<u>\$77,088</u>	<u>5</u>
Total	\$72,361	423	\$66,636	26	\$70,347	18

The salaries of Category IV P.A. program personnel (P.A.'s and non-P.A.'s) by ethnicity and consortia region are shown in Table 21 (next page). Mean salaries of Black/African-American personnel were higher than their White counterparts in three of the four regions. On average, Latino/Hispanics personnel had lower salaries than their Black/African-American counterparts where comparisons could be made.

Table 21. Analysis of Program Personnel by Consortia Region and Ethnicity Category IV

Consortia Region	Mean Annual Salary					
	White	N	Black/African- American	N	Lat/Hisp	N
Northeastern	\$37,261	24	\$46,737	5	\$41,000	6
Eastern	\$33,654	18	\$33,367	3	-----	1
Southeastern	\$32,997	31	\$36,136	7	-----	1
Midwestern	\$44,537	21	-----	1	-----	0
Heartland	\$37,097	11	\$40,504	4	\$35,839	6
Western	\$36,008	22	-----	1	\$39,390	7
Total	\$34,553	127	\$38,440	21	\$37,390	21

Trends in P.A. Program Personnel Salaries from 1985 Through 2006

Trends in P.A. personnel salary from 1985 through 2006 are shown in Table 22. Note, salary data was not available for 1987-88. There has been a 173% increase in P.A. salaries (all categories combined) from 1985-86 to 2006-2007, an average of 5.2% per year. Proportionately, the largest annual increase in salary (10.9%) for all categories occurred between 1989 and 1990.

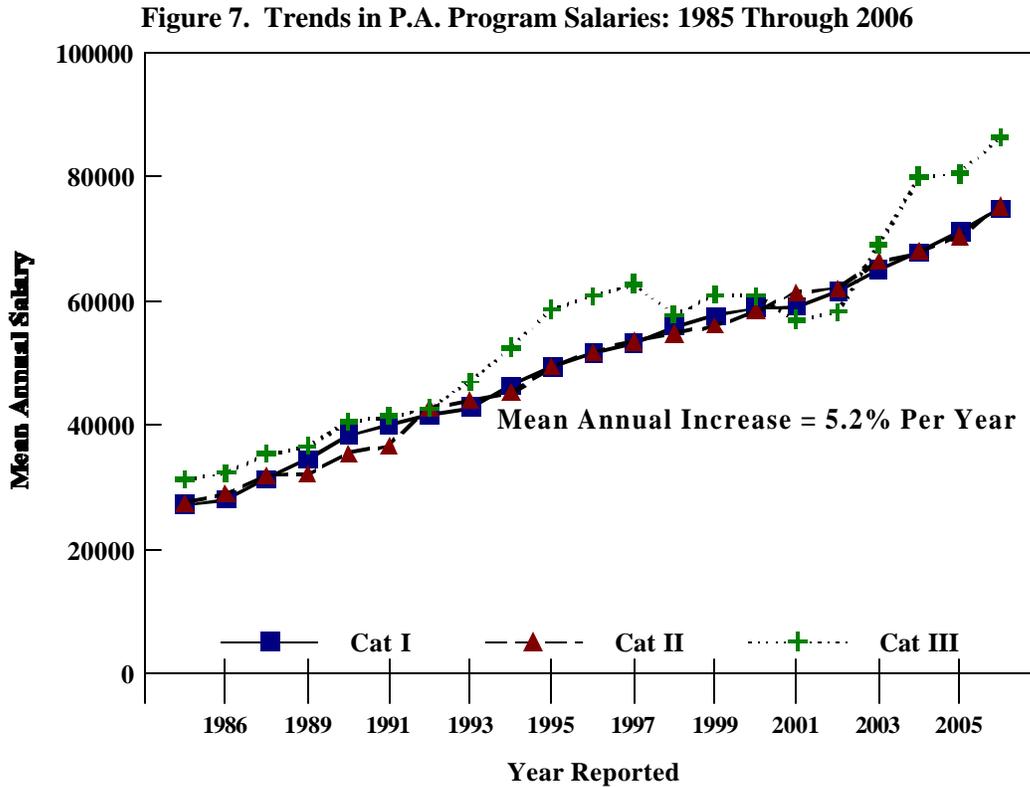
Table 22. Salary and Months in Position for P.A. Personnel, 1985 Through 2006

Categories	Cat. I	Cat. II	Cat. III	All Cat.	Months in Position
1985-86	\$27,264	\$27,553	\$31,298	\$27,769	36.6
1986-87	\$28,129	\$29,060	\$32,451	\$29,010	36.3
1988-89	\$31,362	\$32,054	\$35,547	\$32,099	39.9
1989-90	\$34,610	\$32,300	\$36,756	\$33,723	43.9
1990-91	\$38,547	\$35,578	\$40,661	\$37,404	40.1
1991-92	\$40,280	\$36,807	\$41,552	\$39,192	51.4
1992-93	\$41,689	\$42,885	\$42,719	\$42,471	42.0
1993-94	\$42,945	\$44,127	\$47,038	\$43,956	41.6
1994-95	\$46,498	\$45,357	\$52,578	\$46,549	42.5
1995-96	\$49,510	\$49,589	\$58,720	\$50,469	39.0
1996-97	\$51,662	\$51,906	\$60,973	\$52,550	41.6
1997-98	\$53,314	\$53,730	\$62,849	\$54,164	38.9
1998-99	\$55,964	\$54,943	\$57,878	\$55,729	46.5
1999-00	\$57,687	\$56,164	\$61,033	\$56,539	44.3
2000-01	\$59,013	\$58,556	\$60,973	\$59,108	54.8
2001-02	\$59,208	\$61,568	\$57,003	\$59,757	55.1
2002-03	\$61,679	\$62,161	\$58,376	\$61,400	53.9
2003-04	\$65,107	\$66,449	\$69,166	\$65,804	52.0
2004-05	\$67,926	\$68,037	\$80,074	\$68,648	56.2
2005-06	\$71,381	\$70,534	\$80,590	\$71,771	59.8
2006-07	\$74,998	\$75,314	\$86,467	\$75,821	62.0

Months in position did not vary substantially, averaging 46.6 months over the 21-year period (range of 36.3 to 62.0).

An analysis of variance (ANOVA) of salary was conducted to investigate the effects of the following parameters (data for P.A.'s and non-P.A.'s were combined): personnel category, gender and consortia region. Main effects were found for gender ($F=29.16$; $p<0.01$; men higher than women) and category ($F=25.15$; $p<0.01$; Category I and II higher than Category III).

Trends in salary for all categories of program personnel (P.A.'s only) from 1985 through 2006 are illustrated in Figure 7. Salaries for personnel in Category I and II consistently increased each year with the largest increase occurring in 1988 for Cat I and 1992 for Cat II. Category III salaries steadily increased through 1997. Since then, Cat III salaries have fluctuated, with the largest increase occurring in 2003.



Program Personnel: Academic Classification

The number of Category I - III personnel (P.A.'s and non-P.A.'s) classified as faculty and staff, as well as the tenure track status of those in faculty positions, are shown in Table 23 (next page).

For all categories combined, more than three fourths (N=476; 84%) of personnel were classified as faculty. This distribution of individuals classified as faculty varied greatly between 39% for Category III and 93% for Category I. Category III includes typically administrative-type personnel who may be less likely to be appointed to an academic level position.

Overall, almost one-fourth (23.5%) of the faculty were on the tenure track. However, only 5.3% of the faculty were tenured. Viewed in another way, 22% of those faculty in a tenure track were tenured, with the highest proportion of these tenured faculty in Category III (40%).

Table 23. Program Personnel: Classification and Tenure Track Status

	Personnel Category						Total	
	I		II		III		Number	(%)
<u>Classification</u>	<u>Number</u>	<u>(%)</u>	<u>Number</u>	<u>(%)</u>	<u>Number</u>	<u>(%)</u>	<u>Number</u>	<u>(%)</u>
Faculty	304	93.3%	143	86.1%	29	38.7%	476	84.0%
Staff	22	6.7%	23	13.9%	46	61.3%	91	16.0%
<u>Tenure Status</u>								
In Tenure Track*	86	28.3%	21	14.7%	5	17.2%	112	23.5%
Faculty Tenured**	16	5.3%	7	4.9%	2	6.9%	25	5.3%

* Percent of TOTAL faculty in tenure track.

** Percent of TOTAL faculty tenured (e.g., 25/476 = 5.3%)

Table 24 shows the academic classification and tenure status of Category I - III personnel by gender. The proportion of men holding faculty rank was higher than the proportion of women (93% versus 79%, respectively). A higher percentage of males were on tenure track versus females, 30% and 19%, respectively. Although very few faculty were tenured (5.3%), more male faculty were tenured (6.7%) as compared to female faculty (4.3%).

Table 24. Program Personnel: Classification and Tenure Track Status by Gender

Personnel Classification	Female		Male		Total	
	Number	(%)	Number	(%)	Number	(%)
Faculty Appointment	281	79.2%	194	92.8%	475	84.2%
Staff Appointment	74	20.8%	15	7.2%	89	15.8%
<u>Tenure Status</u>						
Tenure Track Faculty	54	19.2%	58	29.9%	112	23.6%
Tenured Faculty*	12	4.3%	13	6.7%	25	5.3%

* Percent of TOTAL faculty tenured.

A summary of the highest degree held by each category of program personnel is shown in Table 25 (next page). All but 1.6% of Category I - III program personnel were reported to have earned a bachelors or higher degree. Less than one-fifth of the P.A. and non-P.A. personnel held a baccalaureate degree (16%) as their highest degree. Almost two-thirds of the personnel held a master's degree (N=326; 66.4%). Seventy-nine individuals (16.1%) were identified as having earned a doctorate. Proportionately, Category I personnel tended to have more doctorate degrees than those in Category II or III.

Table 25. Program Personnel: Highest Degree Held

Highest Degree	Program Personnel Categories								Categories I - III	
	#	I (%)	#	II (%)	#	III (%)	#	IV (%)	#	(%)
Doctorate	70	23.9%	6	4.2%	3	5.5%	1	1.2%	79	16.1%
Masters	189	64.5%	108	75.5%	29	52.7%	11	12.8%	326	66.4%
Bachelors	32	10.9%	28	19.6%	18	32.7%	52	60.5%	78	15.9%
Associate	<u>2</u>	<u>0.7%</u>	<u>1</u>	<u>0.7%</u>	<u>5</u>	<u>9.1%</u>	<u>22</u>	<u>25.6%</u>	<u>8</u>	<u>1.6%</u>
Total	253	100.0%	143	100.0%	55	100.0%	86	100.0%	491	100.0%

The number and academic rank of program faculty, by category, are shown in Table 26. Over half of the P.A. and non-P.A. faculty hold the academic rank of assistant professor (N=242; 56.5%).

Table 26. Program Personnel: Academic Rank of Faculty

Academic Rank	Program Personnel Categories						Total	
	I		II		III		N	(%)
	<u>N</u>	<u>(%)</u>	<u>N</u>	<u>(%)</u>	<u>N</u>	<u>(%)</u>	<u>N</u>	<u>(%)</u>
Full Professor	11	4.1%	0	0.0%	1	4.2%	12	2.8%
Associate Prof.	35	12.9%	25	18.8%	9	37.5%	69	16.1%
Assistant Prof.	162	59.8%	69	51.9%	11	45.8%	242	56.5%
Instructor/Lect.	<u>63</u>	<u>23.2%</u>	<u>39</u>	<u>29.3%</u>	<u>3</u>	<u>12.5%</u>	<u>105</u>	<u>24.5%</u>
Total	271	100.0%	133	100.0%	24	100.0%	428	100.0%

P.A. and Non-P.A. Personnel Salary Analysis

Salaries for Category I - III P.A. and non-P.A. program personnel by academic classification are shown in Table 27. The mean annual salary of faculty-level personnel was \$75,507 (N=429), 49% higher than those appointed to

Table 27. Faculty and Staff Salaries by Category

Classification	Program Personnel Categories						Categories I - III	
	I		II		III		Mean	N
<u>Faculty</u>	<u>Mean</u>	<u>N</u>	<u>Mean</u>	<u>N</u>	<u>Mean</u>	<u>N</u>	<u>Mean</u>	<u>N</u>
P.A.	\$75,145	226	\$75,458	127	\$87,136	23	\$75,984	376
Non-P.A.	<u>\$75,825</u>	<u>43</u>	<u>\$54,553</u>	<u>5</u>	<u>\$75,820</u>	<u>5</u>	<u>\$73,818</u>	<u>53</u>
Total	\$75,254	269	\$74,112	132	\$85,116	28	\$75,507	429
<u>Staff</u>								
P.A.	\$72,577	11	\$73,788	12	\$78,799	2	\$73,656	25
Non-P.A.	<u>\$51,996</u>	<u>4</u>	<u>\$40,680</u>	<u>9</u>	<u>\$38,604</u>	<u>41</u>	<u>\$39,942</u>	<u>54</u>
Total	\$67,089	15	\$59,599	21	\$40,474	43	\$50,611	79

staff positions (\$50,611; N=79). In general, the annual salaries of P.A. personnel with faculty rank (\$75,984, N=376) were higher than the salaries of non-P.A. personnel with faculty appointments (\$73,818; N=53). Faculty salaries differed substantially between categories with Category III faculty earning the highest annual income.

Among the personnel classified as staff, those that were P.A.'s earned a substantially higher (84%) salary (\$73,656) than non-P.A.'s (\$39,942). In comparison to the previous year (2005-2006), there was over a 4.9% increase in the faculty salaries and a 5.6% decrease in staff salaries.

The relationship between salary and gender of P.A. and non-P.A. faculty and staff is summarized in Table 28. Salaries for male faculty were 6.0% higher than those of female faculty (\$78,221 versus \$73,788, respectively). Male staff earned substantially higher salaries than did female staff, \$64,071 vs. \$48,791, respectively.

Table 28. Program Personnel: Salary of Faculty and Staff in Categories I - III by Gender

<u>Classification</u>	<u>Female</u>		<u>Male</u>	
	<u>Mean</u>	<u>N</u>	<u>Mean</u>	<u>N</u>
<u>Faculty</u>				
P.A.	\$74,716	239	\$78,251	136
Non-P.A.	<u>\$67,799</u>	<u>22</u>	<u>\$78,090</u>	<u>31</u>
Total	\$73,788	261	\$78,221	167
<u>Staff</u>				
P.A.	\$73,322	18	\$74,516	7
Non-P.A.	<u>\$39,397</u>	<u>47</u>	<u>\$49,448</u>	<u>5</u>
Total	\$48,791	65	\$64,071	12

Compared to the previous year (2005-2006), faculty salaries have increased 5.1% for females and 5.0% for males, while staff salaries decreased by 11.0% for males and by 4.6% for females.

Annual salary of program personnel by highest degree earned for all categories is shown in Table 29. Doctoral-level personnel (N=63) earn the highest salary (overall for Categories I - III = \$78,006) and associate degree level individuals the lowest (\$43,912). Category III personnel with a doctorate degree earned the highest salary.

Table 29. Salary of Faculty and Staff Personnel by Highest Degree Held

<u>Highest Degree</u>	<u>Program Personnel Categories</u>									
	<u>I</u>		<u>II</u>		<u>III</u>		<u>IV</u>		<u>Categories I - III</u>	
	<u>Mean</u>	<u>N</u>	<u>Mean</u>	<u>N</u>	<u>Mean</u>	<u>N</u>	<u>Mean</u>	<u>N</u>	<u>Mean</u>	<u>N</u>
Doctorate	\$78,737	56	\$61,020	5	\$100,000	2	-----	1	\$78,006	63
Masters	\$74,716	168	\$74,093	101	\$ 78,326	28	\$44,731	10	\$74,845	297
Bachelors	\$67,249	27	\$65,676	25	\$ 42,735	16	\$38,113	50	\$60,901	68
Associate	\$75,800	2	-----	1	\$ 33,900	5	\$32,319	21	\$43,912	8
Not Reported	\$74,666	32	\$74,951	23	\$43,961	20	\$33,070	89	\$66,565	75
Total	\$74,800	285	\$72,171	155	\$58,079	71	\$35,289	171	\$71,679	511

The salary of personnel classified as faculty is shown by academic rank and category in Table 30 (next page). Full professor had the highest average salary (\$90,832). The range of mean salaries was broad, \$66,977 at the rank of instructor in Category II to \$90,978 for those at the Full Professor level in Category I.

Table 30. Salary of Program Faculty by Academic Rank and Category

	I		II		III		Total	
<u>Academic Rank</u>	<u>Mean</u>	<u>N</u>	<u>Mean</u>	<u>N</u>	<u>Mean</u>	<u>N</u>	<u>Mean</u>	<u>N</u>
Full Professor	\$90,978	11	-----	0	-----	1	\$90,832	12
Associate Prof.	\$80,021	32	\$81,280	24	\$88,811	8	\$81,592	64
Assistant Prof.	\$74,067	153	\$75,124	68	\$84,291	11	\$74,862	232
Instructor/Lect.	\$73,498	59	\$66,977	35	\$78,266	3	\$71,288	97
Not Reported	\$70,815	27	\$64,727	26	\$45,402	47	\$57,288	100
Total	\$74,800	282	\$72,171	153	\$70,755	70	\$71,679	505

Program Directors of Physician Assistant Programs

The general characteristics of program directors are shown in Table 31 and include percent of time, annual salary and months in position for P.A. and non-P.A. directors by gender and highest degree held. On average, program directors devoted 98.4% of their time to program-related activities. While the percentage of time ranged from 60% to 100%, the majority of the directors (N=82; 92%) were working full-time. Ninety-four percent of the directors were P.A.'s (N=75).

Table 31. Characteristics of Program Directors

<u>Characteristics</u>	<u>Mean</u>	<u>S.D.</u>	<u>Range</u>	<u>N</u>		
Percent Time	98.4%	6.6	60% - 100%	89		
<u>Annual Salary</u>	<u>\$101,246</u>	<u>\$18,756</u>	<u>\$ 70,120 - 187,000</u>	<u>80</u>		
P.A.	\$100,326	\$16,443	\$ 70,120 - 138,790	75		
Non-P.A.	\$115,039	\$41,129	\$ 85,000 - 187,000	5		
Male	\$105,922	\$19,725	\$ 72,000 – 187,000	45		
Female	\$95,234	\$15,739	\$ 70,120 – 130,000	35		
Doctorate	\$104,992	\$24,671	\$ 70,120 - 187,000	28		
Masters	\$97,590	\$14,645	\$ 74,000 - 127,080	39		
Bachelors	-----	-----	-----	1		
<u>Months in Position</u>	<u>84.8</u>	<u>81.3</u>	<u>1-396</u>	<u>88</u>		
P.A.	86.1	84.1	1-396	80		
Non-P.A.	65.6	44.9	29-152	7		
Male	87.7	85.2	1-396	47		
Female	82.6	77.6	2-341	41		
<u>Highest Degree Held</u>	<u>Female</u>	<u>%</u>	<u>Male</u>	<u>%</u>	<u>Total</u>	<u>%</u>
Doctorate*	13	40.6%	19	59.4%	32	41.0%
Masters	22	48.9%	23	51.1%	45	57.7%
Baccalaureate	0	0.0%	1	100.0%	1	1.3%

* Includes Ph.D., Ed.D., D.H.Sc. and M.D. Degrees

The mean average salary for program directors was \$101,246, ranging from \$70,120 to \$187,000. Program directors who were non-P.A.'s earned a higher salary in comparison to those who were P.A.'s (\$115,039 and \$100,326, respectively). The average months in position was 84.8 months.

Male program directors had higher average salaries (\$105,922) than did female directors (\$95,234). The mean time in position of female directors exceeded that of male directors by four months (87 versus 83 months, respectively). In comparison to the 2005-2006 data, mean salaries increased by 4.2% (\$101,246 versus \$97,206).

Program Director Salaries: Regional Differences

A summary of program directors’ salary and months in position by consortia region is shown in Table 32. Program directors associated with programs located in the Midwestern region had lower mean salaries (\$93,407) compared with the rest of the regions. Directors in the Heartland region had the highest mean salaries (\$108,059). The lowest individual salary for a program director was in the Southeastern region (\$70,120). Program directors in the Heartland region had been employed in their positions the longest time, over ten years (124 months) and those in the Midwestern region the shortest period of time (58.4 months).

Table 32. Salary and Months in Position of Program Directors by Region

<u>Consortia Region</u>	<u>Program Director Salary</u>			<u>Months in Position</u>			
	<u>N</u>	<u>Mean</u>	<u>Range</u>	<u>N</u>	<u>Mean</u>	<u>Median</u>	<u>Range</u>
Northeastern	14	\$100,044	\$74,000- 125,443	19	97.3	72.0	6-396
Eastern	10	\$ 95,934	\$81,456- 125,000	11	75.7	54.0	5-181
Southeastern	17	\$105,074	\$70,120- 130,000	18	77.1	40.0	9-281
Midwestern	16	\$ 93,407	\$72,000- 122,000	17	58.4	47.0	2-147
Heartland	9	\$108,059	\$77,334- 138,790	9	124.0	115.0	18-372
Western	14	\$105,305	\$77,000- 187,000	14	88.3	77.5	1-252
Total	80	\$101,246	\$70,120-187,000	88	84.8	62.0	1-396

Medical Directors of Physician Assistant Programs

The characteristics of P.A. program medical directors are shown in Table 33. Percent time data were available for 86 medical directors, of which seven were employed as such on a full-time basis. On average, medical directors devoted less than one-third (31.2%) of their time to program-related activities. The mean annual salary of the medical directors reporting (N=78) was \$94,134 but varied extensively, ranging from \$4,500 to \$300,000. Male medical directors (N=62) earned a lower annual mean salary (\$90,299) than did female medical directors (\$113,947).

Table 33. Characteristics of Program Medical Directors

	<u>Mean</u>	<u>S.D.</u>	<u>Median</u>	<u>Range</u>	<u>N</u>
<u>Percent Time</u>	31.2	28.1	20.0	1%-100%	86
<u>Annual Salary</u>	\$94,134	\$78,947	\$85,000	\$ 4,500-300,000	78
Female	\$113,947	\$61,243	\$125,000	\$ 5,000-201,100	15
Male	\$90,299	\$82,688	\$53,833	\$ 4,500-300,000	62
<u>Months in Position</u>	72.2	69.0	50.0	3-360	84
Female	50.6	51.7	36.0	3-192	19
Male	78.5	69.9	60.0	6-360	65

Overall, medical director salaries increased by 7.4% from the previous year. Respondents which originally had not made corrections for full-time equivalent were contacted in order to clarify figures. The majority of medical directors were male (65; 77%). The average months in position is higher for male directors (78.5 months).

Data concerning medical director salaries, months in position and consortia region are shown in Table 34. Medical directors of those programs in the Heartland region had the highest mean salaries (\$146,623). Those directors in the Eastern had the lowest salaries (\$42,138). Medical directors in the Northeastern region were in their positions for the longest period of time (91.3 months). It should be noted that the range in both salaries (range of \$4,500 to \$300,000) and months in position (from 3 to 360 months) was extensive.

Table 34. Salary and Months in Position of Medical Directors by Region

<u>Consortia Region</u>	<u>Medical Director's Salary*</u>				<u>Months in Position</u>			
	<u>N</u>	<u>Mean</u>	<u>Median</u>	<u>Range</u>	<u>N</u>	<u>Mean</u>	<u>Median</u>	<u>Range</u>
Northeastern	13	\$ 80,432	\$ 50,000	\$15,000-300,000	18	91.3	71.5	7-360
Eastern	11	\$ 42,138	\$ 25,000	\$ 7,000-128,970	11	75.8	48.0	3-299
Southeastern	17	\$114,067	\$117,000	\$ 5,000-280,000	18	67.8	45.5	8-192
Midwestern	16	\$ 67,477	\$ 27,000	\$ 4,500-237,273	17	65.1	47.0	6-184
Heartland	7	\$146,623	\$125,000	\$ 7,500-300,000	8	81.9	57.0	9-204
Western	14	\$127,730	\$124,800	\$25,000-222,789	13	56.2	50.0	6-203
Total	78	\$ 94,134	\$ 85,000	\$ 4,500-300,000	85	72.8	50.0	3-360

* Corrected for full-time equivalent.

The medical specialties of P.A. program medical directors are shown in Table 35. The majority of medical directors (N=41; 65.1%) were practicing in primary care specialties, predominantly family medicine (N=22; 35%) and internal medicine (N=15; 24%). Only twenty-two medical directors were in non-primary care specialties.

Table 35. Medical Specialties of P.A. Program Medical Directors

<u>Primary Care</u>			<u>Non-Primary Care</u>		
<u>Medical Specialty</u>	<u>N</u>	<u>(%)</u>	<u>Medical Specialty</u>	<u>N</u>	<u>(%)</u>
Family Medicine	22	34.9%	Cardiology	5	7.9%
Internal Medicine	15	23.8%	Emergency Med.	5	7.9%
Pediatrics	4	6.3%	Other	12	19.0%
Total	41	65.1%	Total	22	34.9%

Comparisons between Medical and Program Directors

A comparison between medical and program directors' salaries from 1984-85 through 2006-2007 is shown in Table 36 (next page). Note, information concerning the characteristics of medical directors was not available in 1987-88. Between 1984 and 2006, there has been a 170% increase in the mean salary for program directors and a 54% increase for medical directors. The mean time in position has increased for program directors over this period (64.5 to 84.8 months).

Table 36. Trends in Directors' Salaries and Months in Position from 1984 Through 2006

Academic Year	Program Director			Medical Director		
	Mean	Months	N	Mean	Months	N
1984-1985	\$ 37,499	64.5	31	\$ 61,000	69.1	23
1985-1986	\$ 36,491	69.3	32	\$ 66,900	70.1	21
1986-1987	\$ 39,939	68.8	38	\$ 66,300	63.9	29
1987-1988	\$ 41,324	67.9	38	N/A		
1988-1989	\$ 41,730	90.3	42	\$ 74,056	75.3	36
1989-1990	\$ 42,800	88.8	36	\$ 76,168	78.8	32
1990-1991	\$ 50,824	85.5	41	\$ 85,646	69.1	36
1991-1992	\$ 54,266	98.9	38	\$ 75,071	72.3	39
1992-1993	\$ 56,206	91.4	51	\$ 98,288	69.3	39
1993-1994	\$ 57,241	85.2	50	\$ 95,882	53.8	33
1994-1995	\$ 63,115	89.9	55	\$107,617	67.3	32
1995-1996	\$ 67,437	88.0	67	\$102,509	61.7	55
1996-1997	\$ 69,808	91.7	72	\$ 89,186	64.5	55
1997-1998	\$ 70,031	68.3	90	\$ 99,372	54.8	75
1998-1999	\$ 73,048	73.6	80	\$101,066	62.5	62
1999-2000	\$ 76,709	70.3	88	\$ 98,214	62.2	71
2000-2001	\$ 79,878	75.6	88	\$108,575	64.0	72
2001-2002	\$ 83,771	75.8	91	\$104,355	65.1	81
2002-2003	\$ 85,780	70.9	85	\$ 99,190	64.6	74
2003-2004	\$ 87,348	71.9	92	\$105,244	70.2	77
2004-2005	\$ 91,767	80.9	102	\$ 94,561	71.3	82
2005-2006	\$ 97,206	76.8	93	\$ 87,661	72.0	88
2006-2007	\$101,246	84.8	80	\$ 94,134	72.2	78
23-yr Mean	\$ 65,455	79.5	64	\$ 90,500	67.0	54

On average, in 2006, program directors earned an annual salary approximately 7.6% higher than the typical medical director (\$101,246 versus \$94,134). Over the twenty-three year period, the medical directors earned an annual salary of approximately 38% higher than the typical program director (\$90,500 versus \$65,455). Trends in salary for the program and medical directors from 1984 through 2006 are in Figure 8 (next page) and clearly illustrates the variation in directors' salaries since 1984.

A comparison of academic position and tenure status between the directors is shown in Table 37. The majority of medical and program directors held faculty level positions with 7% of these directors classified as staff.

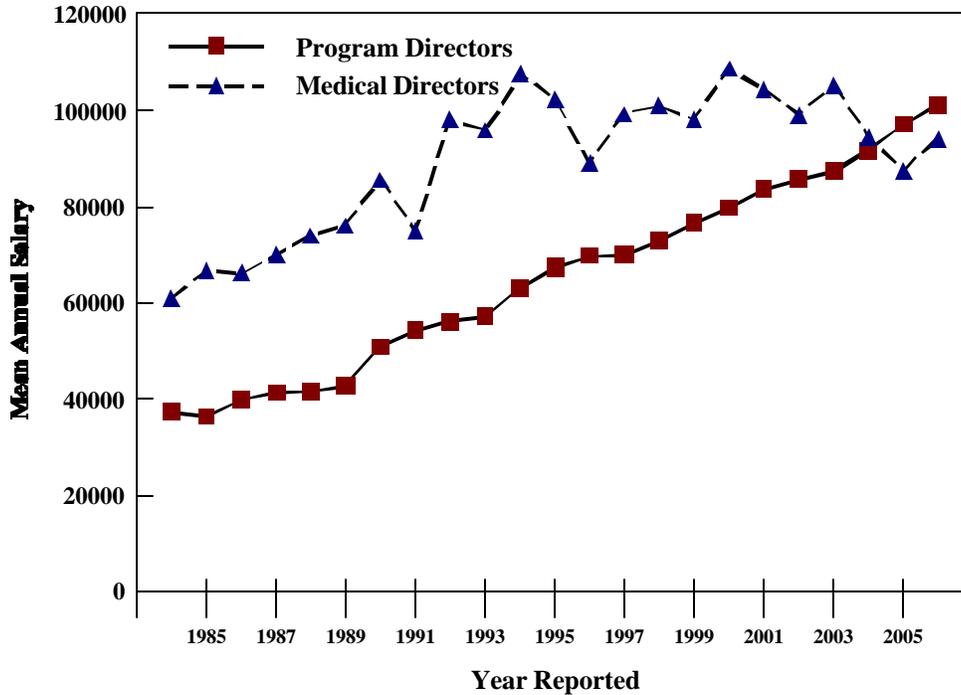
Table 37. Program and Medical Directors: Position and Tenure Track Status

Level of Position	Program Director		Medical Director	
	Number	(%)	Number	(%)
Staff Appointment	4	4.5%	8	9.5%
Faculty Appointment	85	95.5%	76	90.5%
Total	89	100.0%	84	100.0%
Tenure Status				
Tenure Track Faculty	31	36.5%	20	26.3%
Faculty Tenured*	18	21.2%	10	13.2%

* Percent of TOTAL faculty tenured

More program directors than medical directors in faculty-level positions were on a tenure track and less than one-fifth of the faculty directors were tenured. In 2006 over 90% of the directors were faculty. The proportion of faculty directors on the tenure track was 37% and 26%.

Figure 8. Program and Medical Directors' Salaries: 1984 Through 2006



A comparison between the academic rank of medical and program director faculty is shown in Table 38. About the same number of program directors (96.1%) held professorial rank as medical directors (96.6%) held professorial rank (Assistant to Full Professor).

Table 38. Program and Medical Directors: Academic Rank

<u>Academic Rank of Faculty</u>	<u>Program Director</u>		<u>Medical Director</u>	
	<u>Number</u>	<u>(%)</u>	<u>Number</u>	<u>(%)</u>
Full Professor	10	13.0%	22	37.3%
Associate Professor	40	51.9%	17	28.8%
Assistant Professor	24	31.2%	18	30.5%
Instructor/Lecturer	3	3.9%	2	3.4%
Total	77	100.0%%	59	100.0%

Regression Analysis of Salaries

Linear regression analysis was used to describe the relationship between salary and months in position for all core program faculty and staff. The resulting regression equations provide a means of determining salary while correcting for months in position. Table 39 (next page) identifies regression equations for each of the four P.A. and non-P.A. personnel categories, and for program and medical directors.

Equations from Table 39 will "predict" salary within and across each category using the number of months as the independent variable. For example, one would predict that the salary of a Category I individual who has been in

his or her position for 60.3 months would be around \$74,587 (i.e. \$71,138 + \$3,449), a value similar to that reported in Table 13 for the average Category I individual (i.e. \$74,998) having been employed for a mean of 60.3 months.

Table 39. Regression Equations for Salary and Months in Position for P.A. Program Personnel

<u>Characteristic</u>	<u>Base</u>	<u>+ (Constant</u>	<u>x Months)</u>	<u>N</u>
Category I	\$ 71,138	+ (\$ 57.20	x _____)	282
Category II	\$ 68,459	+ (\$ 61.90	x _____)	152
Category III	\$ 48,191	+ (\$ 92.70	x _____)	66
Category IV	\$ 31,492	+ (\$ 47.60	x _____)	164
Categories I- III	\$ 67,647	+ (\$ 59.50	x _____)	500
Program Directors	\$ 93,247	+ (\$ 88.90	x _____)	79
Medical Directors	\$ 88,756	+ (\$ 84.00	x _____)	77

P.A. Program Personnel Turnover

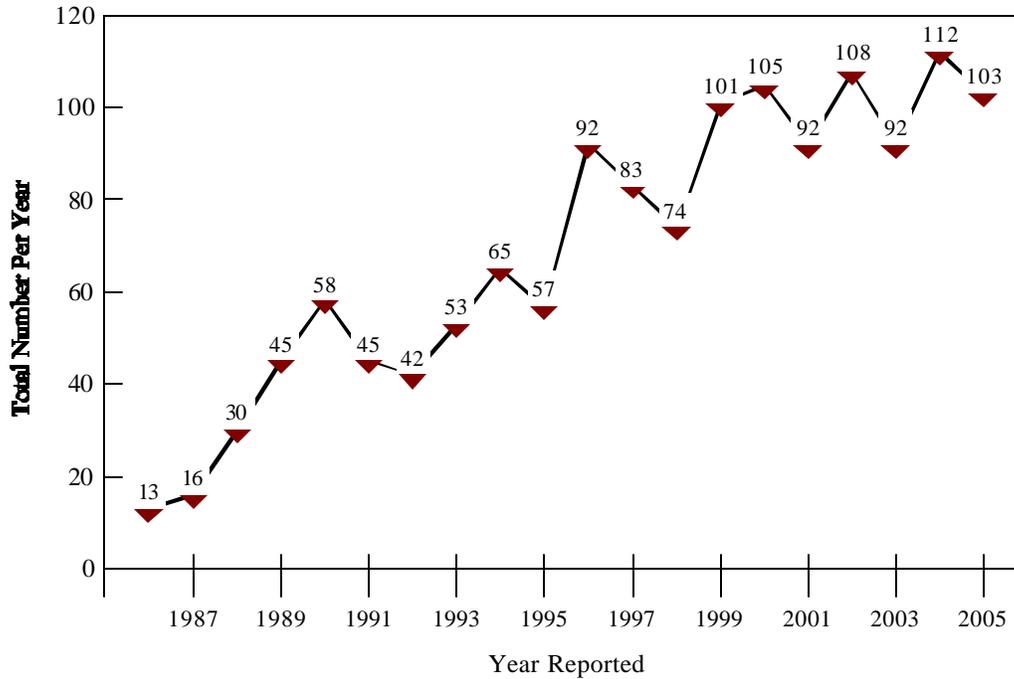
The 2006 survey requested updated information on personnel turnover for the period September 2005 through August 2006. Program respondents were asked to provide data on the type, frequency and characteristics of personnel terminating and those employed to fill the position. Reported herein is the turnover activity for 2005-2006 as well as the cumulative data for the twenty-year period (1986-2005) in Table 40. Data are expressed as both total number and mean number of individuals per program for the time period identified. Over the twenty year-period examined, respondents reported that 1,387 personnel left their positions. As shown in Figure 9 (next page), there has been an overall increase in turnover since 1986.

Table 40. Program Personnel Turnover 1986 Through 2005

<u>Academic Year</u>	<u>Total Number</u>	
	<u>Departing</u>	<u>Mean/Program</u>
1986-1987	13	0.3
1987-1988	16	0.3
1988-1989	30	0.6
1989-1990	45	0.9
1990-1991	58	1.2
1991-1992	45	0.8
1992-1993	42	0.8
1993-1994	53	0.9
1994-1995	65	0.9
1995-1996	57	0.7
1996-1997	92	1.0
1997-1998	83	0.9
1998-1999	74	0.7
1999-2000	101	1.1
2000-2001	105	1.1
2001-2002	92	0.9
2002-2003	108	1.0
2003-2004	92	0.8
2004-2005	112	1.1
2005-2006	<u>103</u>	<u>1.5</u>
20-year Mean	69.3	0.9

During the 2005-2006 academic year, 103 P.A. program personnel departed (N=71 programs reported information) for an average of 1.45 per program. The overall 20-year mean is 69.3 personnel departing per year, an average of 0.9 persons departing/program.

Figure 9. Trends in Personnel Turnover: 1986 Through 2005



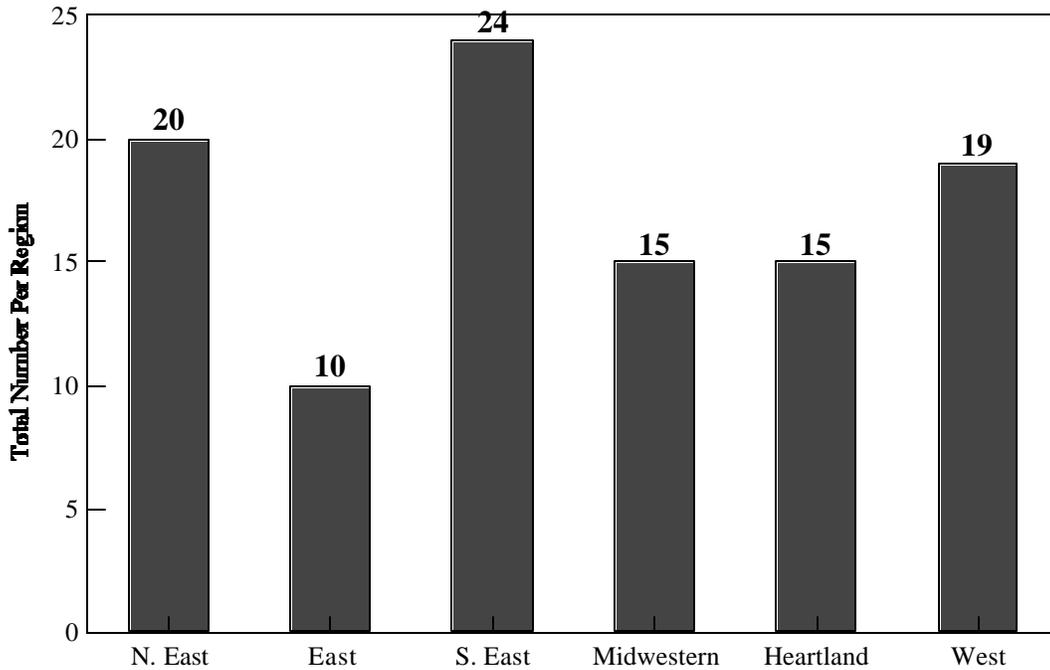
Our best estimate of the mean number of core program personnel is 10.2 per program, and includes one program and medical director, 4.4 P.A.'s and 1.3 non-P.A.'s and 2.5 Category IV personnel. Given the average turnover per year we estimate that 14.2% of program personnel departed this year (1.45/10.2).

The number of personnel (and mean/program) that departed over the past twenty years and those departing in 2005, by region, is shown in Table 41 and illustrated in Figure 10 (next page). Turnover varied by region. For example, programs in the Heartland region reported the highest turnover (2.50 per program) while programs in the Eastern region had the lowest rate of turnover (0.91 per program).

Table 41. Program Personnel Turnover by Region, 1986 Through 2005

Consortia <u>Region</u>	<u>Number in 20 Years</u>	<u>Number in 2005</u>	<u>2005 Mean/ Program</u>	<u>N</u>
Northeastern	260	20	1.33	15
Eastern	169	10	0.91	11
Southeastern	230	24	1.71	14
Midwestern	245	15	1.25	12
Heartland	190	15	2.50	6
Western	<u>292</u>	<u>19</u>	<u>1.46</u>	<u>13</u>
Total	1,386	103	1.45	71

Figure 10. Personnel Turnover By Region: 2005-2006
(From 9/1/2005 Through 8/31/2006)



A comparison of the number and category of personnel departing, those employed, percent of positions unfilled and mean number of weeks to fill the position are shown in Table 42. Overall, 102 program personnel (seventeen Category IV) departed in 2005 with turnover highest among Category I personnel and least for medical directors. On average 11.2 weeks were required to fill a position. Filling program director positions averaged 13.9 weeks while medical director positions were filled almost immediately.

Table 42. Comparison of Personnel Turnover in 2005 by Category

<u>Category</u>	<u>Number Departed</u>	<u>Number Employed</u>	<u>Percent Unfilled</u>	<u>Weeks to Fill Position</u>
I	55	39	29.1%	14.5
II	16	15	6.3%	10.5
III	4	2	50.0%	2.0
IV	17	14	17.6%	4.1
Program Director	8	5	37.5%	13.9
Medical Director	<u>2</u>	<u>2</u>	<u>0.0%</u>	<u>1.5</u>
Total	102	77	24.5%	11.2

Table 43 (next page) shows the characteristics of personnel departing and those employed. On average, personnel departed in 2005 were older (4.8 years) than those employed. More females than males were employed as departed. A higher percentage of non-white personnel were employed than departed.

Table 43. Characteristics of Personnel Departed and Employed in 2005
Program Personnel

Characteristic	Departed		Employed	
	(%)	N	(%)	N
Mean Age (yrs)		46.3		41.5
Range		26-83		22-64
<u>Gender</u>				
Male	39.2%	40	29.9%	23
Female	60.8%	62	70.1%	54
<u>Ethnicity</u>				
White	80.0%	80	75.3%	58
Non-White	20.0%	20	24.7%	19

The academic characteristics of personnel departing and those filling the vacated positions are shown in Table 44. Doctorate includes Ph.D., D.H.Sc., Ed.D. and M.D. As indicated in Table 44, the majority of personnel employed held a masters degree (62.1%) as their highest credential. Of those departing, 54 held a masters degree (66.7%) and 14 held a doctorate degree (17.3%). In addition, the majority of personnel departing were P.A.'s (73.8%) and those employed to fill these positions were also P.A.'s (74.0%).

Table 44. P.A. Program Personnel Turnover in 2005: Academic Characteristics

Highest Degree	Program Personnel			
	N	Departed	N	Employed
Associate/Certificate	2	2.5%	1	1.5%
Baccalaureate	11	13.6%	14	21.2%
Masters	54	66.7%	41	62.1%
Doctoral	14	17.3%	10	15.2%
P.A. Credentialed	76	73.8%	57	74.0%

The reasons cited for personnel turnover during 2005 and the twenty-year totals, are shown in Table 45. In 2005, 23 of the individuals departing did so for career advancement (27%). Seven were terminated. Over the twenty-year period, career advancement was the primary reason for departing followed by return to clinical practice and geographic relocation.

Table 45. P.A. Program Personnel Turnover:
Reasons for Termination in 2005 Compared to the Twenty-Year Totals

Reasons for Terminating	2005		20-Year Totals	
	N	(%)	N	(%)
Career Advancement	23	27.1%	259	22.3%
Return to Clinical Practice	15	17.6%	207	17.8%
Geographic Relocation	11	12.9%	181	15.6%
Retired	9	10.6%	78	6.7%
Termination	7	8.2%	71	6.1%
Job Dissatisfaction	2	2.4%	53	4.6%
Returned to School	0	0.0%	44	3.8%
Family Obligations	4	4.7%	43	3.7%
Salary Dissatisfaction	0	0.0%	33	2.8%
Other	14	16.5%	193	16.6%
Total	85	100%	1162	100.0%

A comparison of salaries and months in position between personnel departing and those employed is shown for each year in Table 46. On average, over the twenty-year period, there has been a mean salary increase of 3% for newly employed individuals as compared to those departing.

Table 46. Salaries of Departing and Newly Employed Personnel, 1986 Through 2005

<u>Academic Year</u>	<u>N</u>	<u>Salary Departing</u>	<u>Months in Position</u>	<u>Salary New Employee</u>	<u>Months Prior Position</u>
1986-1987	13	\$30,868	41.3	\$30,000	35.0
1987-1988	16	\$30,900	73.1	\$33,500	57.4
1988-1989	30	\$33,000	43.5	\$34,000	38.1
1989-1990	45	\$34,000	41.8	\$38,000	55.5
1990-1991	58	\$38,200	22.7	\$40,000	52.3
1991-1992	45	\$38,960	39.4	\$38,450	47.2
1992-1993	40	\$44,748	48.1	\$43,151	54.7
1993-1994	46	\$43,857	31.5	\$44,667	52.3
1994-1995	58	\$44,118	48.4	\$45,536	45.3
1995-1996	43	\$46,771	35.0	\$51,127	39.6
1996-1997	78	\$47,523	48.9	\$51,533	46.6
1997-1998	75	\$48,926	42.0	\$53,366	45.7
1998-1999	64	\$51,402	46.4	\$55,479	40.1
1999-2000	94	\$48,523	42.1	\$47,899	26.5
2000-2001	79	\$53,881	46.0	\$49,997	36.0
2001-2002	72	\$52,775	39.2	\$53,718	48.4
2002-2003	85	\$59,280	48.3	\$57,456	45.3
2003-2004	80	\$58,624	55.1	\$61,574	39.8
2004-2005	99	\$60,089	47.0	\$62,137	53.7
2005-2006	82	\$66,864	54.1	\$64,753	54.0
20-Year Mean	1,202	\$46,665	44.7	\$47,817	45.7

The greatest salary differences between departing and newly employed personnel were in 1989-90 (11.8%) and 1995-96 (9.3%). Overall, personnel departing had been in their positions an average of 45 months, while those employed had been in their previous position one month longer (46 months).

SECTION III. P.A. STUDENT CHARACTERISTICS

Physician Assistant Student Enrollment

The maximum capacity and current enrollment of P.A. students in the most recently enrolled classes, 2006-2007 (first-year class), 2005-2006 (second-year class) and 2004-2005 (third-year class) are shown in Table 47. The proportion of maximum capacity that remained unfilled and the resident status of the students are also presented. The dates in parentheses indicate the academic year of admission and the number indicates the programs responding.

Table 47. Maximum Class Capacity and Current Enrollment in Physician Assistant Programs

		<u>Maximum Capacity</u>	<u>Current Enrollment</u>	<u>% Capacity Unfilled</u>	<u>% Residents</u>
<u>First-Year Class</u> (2006-2007)	Mean	43.5	42.3	5.5%	72.5%
	Median	40.0	36.0	0.0%	73.3%
	Range	(14-195)	(11-195)	(0-69%)	(16-100%)
	Number	99	100	85	81
<u>Second-Year Class</u> (2005-2006)	Mean	40.5	38.5	6.8%	75.2%
	Median	37.0	34.0	0.0%	78.7%
	Range	(3-101)	(14-101)	(0-46%)	(17-100%)
	Number	99	100	93	80
<u>Third-Year Class</u> (2004-2005)	Mean	36.6	32.0	10.3%	82.7%
	Median	33.0	30.5	0.0%	84.3%
	Range	(10-86)	(10-65)	(0-66%)	(48-100%)
	Number	32	32	26	22
<u>All Classes</u>	Mean	95.9	91.3	6.1%	73.7%
	Median	89.0	83.0	0.0%	76.5%
	Range	(29-296)	(29-296)	(0-46%)	(20-100%)
	Number	98	99	87	77

* Includes both full- and part-time students.

The mean maximum capacity for the first-year class increased from last year (41.9) and is reported as 43.5; the mean maximum capacity for the second-year class also increased from last year (from 39.7 to 40.5); and the mean maximum capacity for the third-year class increased from 34.4 to 36.6 students. The maximum capacity for all classes increased by 2.7 students per program from last year. It should be noted that some of the programs with students in a “third year” were cases where there was a 1-6 month overlap between the second and third year of the curriculum (i.e., programs that were 25, 28, 30 months in length).

The medians for the maximum capacity and current enrollment of the classes are listed on the table. Note that the medians are lower than the mean in each category except resident status.

The percent of capacity unfilled for the first-year class was 5.5% and 6.8% for the senior class (the latter figure likely reflects factors like attrition during the previous year). Maximum capacity of P.A. programs varied extensively for both first- and second-year classes, ranging from 3 to 195. The maximum capacity for all classes

averaged 95.9 students and with a mean enrollment of 91.3 students, approximately 6.1% of the maximum capacity (all classes) remained unfilled.

Current enrollment in the first-year class averaged 42.3 students per program (100 programs; range 11 to 195) and 38.5 students/program in the second-year class. In comparison, the number of first- and second-year students in the previous year was 40.8 and 37.0, respectively. It should be noted that the enrollment figures include both full-time and part-time students, the latter accounting for only 0.5% of the enrollment. On average, approximately 73% of the students in the first-year and 75% of the second-year class were residents of the state in which the program was located.

The current enrollment for all classes by gender and full- and part-time student status is shown in Table 48. The majority of both full-time and part-time students were female, averaging around 73%. Thirty-one programs reported that a "third-year class" was enrolled.

Table 48. Current Enrollment by Gender and Class-Year

	<u>1st Year Class (N=100)</u>			<u>2nd Year Class (N=101)</u>			<u>3rd Year Class (N=31)</u>		
<u>Full-Time</u>	<u>Mean</u>	<u>(%)</u>	<u>Range</u>	<u>Mean</u>	<u>(%)</u>	<u>Range</u>	<u>Mean</u>	<u>(%)</u>	<u>Range</u>
Male	11.6	28.1%	1-144	10.6	27.9%	0-79	7.6	23.2%	1-25
Female	<u>29.7</u>	<u>71.9%</u>	9- 74	<u>27.4</u>	<u>72.1%</u>	7-65	<u>25.1</u>	<u>76.8%</u>	4-99
Total	41.3	100%		38.0	100%		32.7	100%	
	<u>1st Year Class (N=12)</u>			<u>2nd Year Class (N=3)</u>			<u>3rd Year Class (N=2)</u>		
<u>Part-Time</u>	<u>Mean</u>	<u>(%)</u>	<u>Range</u>	<u>Mean</u>	<u>(%)</u>	<u>Range</u>	<u>Mean</u>	<u>(%)</u>	<u>Range</u>
Male	1.5	18.1%	0-11	3.0	21.4%	0- 6	3.5	46.7%	-----
Female	<u>6.8</u>	<u>81.9%</u>	0-26	<u>11.0</u>	<u>78.6%</u>	0-27	<u>4.0</u>	<u>53.3%</u>	-----
Total	8.3	100%		14.0	100%		7.5	100%	

It should be noted that respondents were asked to identify only those classes enrolled in the "professional" component of the curriculum, thus, a 4-year program may only have two years of "P.A.-specific" curriculum. Twelve programs reported they enrolled part-time students in the first year; three programs also indicated they had part-time students in the second year of the program and two programs reported part-time students in the third-year.

Trends in Maximum Capacity and Student Enrollment

The mean maximum class capacity, total student enrollment and percent of capacity unfilled from 1984 through 2006 are shown in Table 49 (next page). Maximum capacity over the past twenty-three years averaged 76.9 students for all classes and ranged from 56.1 to 95.9. The percent of capacity that remained unfilled varied around a mean of 10.9%, however has remained below the mean since 1990. The trends in enrollment, maximum and unfilled capacity are illustrated in Figure 11 (page 40). Total enrollment from 1984 through 1993 averaged 53.76 students/program. In the subsequent thirteen years (1994-2006) enrollment averaged 80.8 and varied between 76.0 students to 91.3 students. This current year has seen an increase in the current enrollment/program by 4.3%.

Table 49. Total Student Enrollment of All Classes, 1984 Through 2006

Academic Year	Programs Responding	Maximum Capacity All Classes	Current Enrollment All Classes	Percent Capacity Unfilled
1984-1985	39	58.2	47.0	17.8%
1985-1986	44	60.4	46.7	21.3%
1986-1987	47	61.9	49.1	18.8%
1987-1988	48	57.4	47.3	19.6%
1988-1989	48	56.1	45.6	16.3%
1989-1990	45	58.9	50.2	14.8%
1990-1991	50	68.1	56.6	16.9%
1991-1992	50	69.7	62.1	9.2%
1992-1993	57	71.8	65.1	8.9%
1993-1994	56	72.7	67.9	5.1%
1994-1995	61	85.4	78.6	5.5%
1995-1996	68	83.2	79.4	6.1%
1996-1997	77	83.6	77.3	7.3%
1997-1998	95	84.1	81.3	9.8%
1998-1999	96	87.4	82.5	8.5%
1999-2000	105	83.3	76.7	9.0%
2000-2001	102	86.5	78.8	7.1%
2001-2002	105	82.8	76.0	8.2%
2002-2003	103	86.7	75.9	10.4%
2003-2004	109	89.8	80.3	9.3%
2004-2005	110	91.9	85.1	8.2%
2005-2006	105	93.2	87.5	6.2%
2006-2007	<u>99</u>	<u>95.9</u>	<u>91.3</u>	<u>6.1%</u>
23-Yr. Mean	74.7	76.9	69.1	10.9%

First-Year Students Enrolled

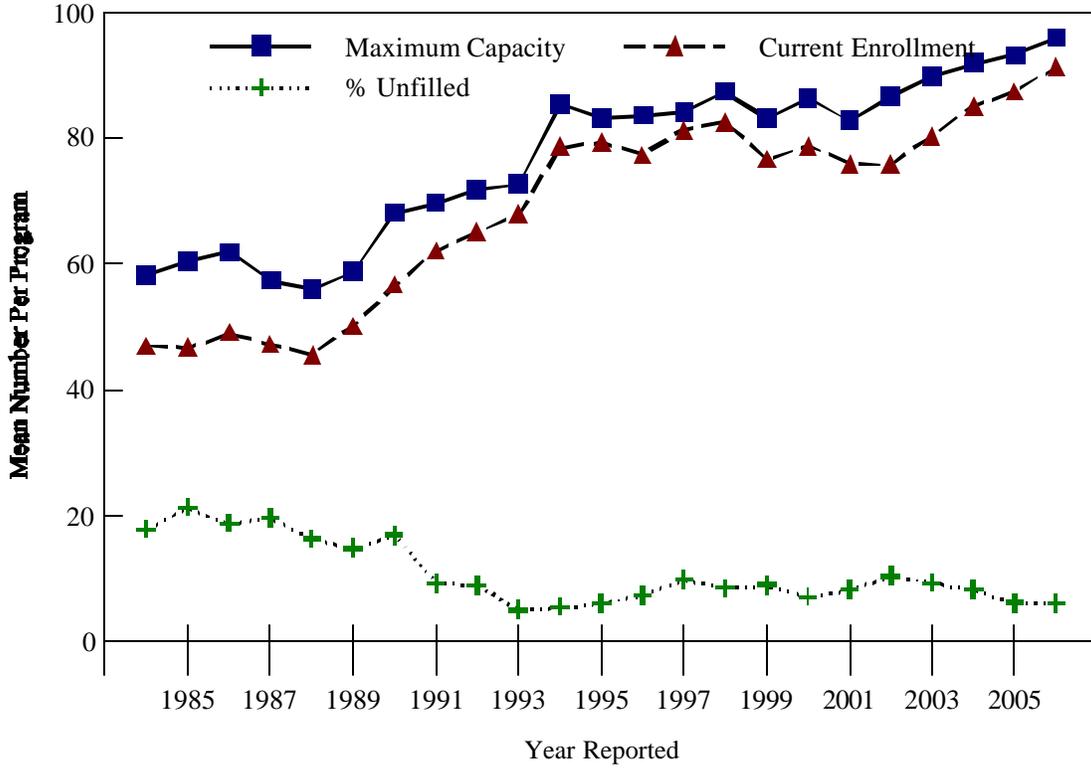
The number of those enrolled in the most recent P.A. class (2006-2007) is shown in Table 50. In addition, information on the mean number of full- and part-time students is also provided. On average, 42.3 students per program were enrolled in the first-year class (100 programs; range from 11-195); only 2% were part-time students (1.0/program). These findings mark an increase (19.8%) in first-year enrollment over the 23-year average (i.e., 42.3/program versus an average of 35.3/program).

Table 50. Student Characteristics, Class of 2006-2007

	<u>Number Enrolled</u>		
	<u>F.T.*</u>	<u>P.T.*</u>	<u>Total</u>
Mean	41.3	1.0	42.3
Median	36.0	0.0	36.0
Range	11-195	0-37	11-195
# Programs	100	100	100

* F.T. = Full-Time; P.T. = Part-Time

Figure 11. Trends in Enrollment: 1984 Through 2006



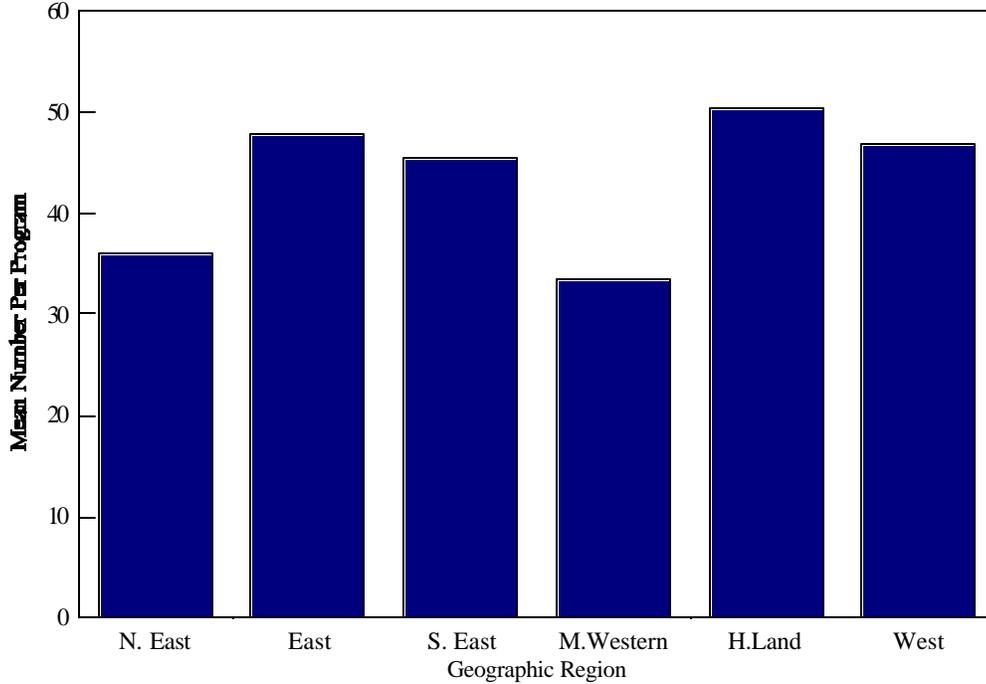
First-Year Students Enrolled by Consortia Region

A comparison between the mean number of students enrolled by consortia region is shown in Table 51 and Figure 12 (next page), ‘N’ indicates the number of programs responding. The largest number of enrollees was in the Heartland region (50.3) and the smallest numbers were in the Midwestern region (33.6).

Table 51. Number of Enrollees by Region

Consortia <u>Region</u>	<u>Enrollees</u>	
	<u>N</u>	<u>Total</u>
Northeastern	22	36.0
Eastern	12	47.8
Southeastern	20	45.5
Midwestern	18	33.6
Heartland	11	50.3
Western	<u>17</u>	<u>46.8</u>
Total	100	42.3

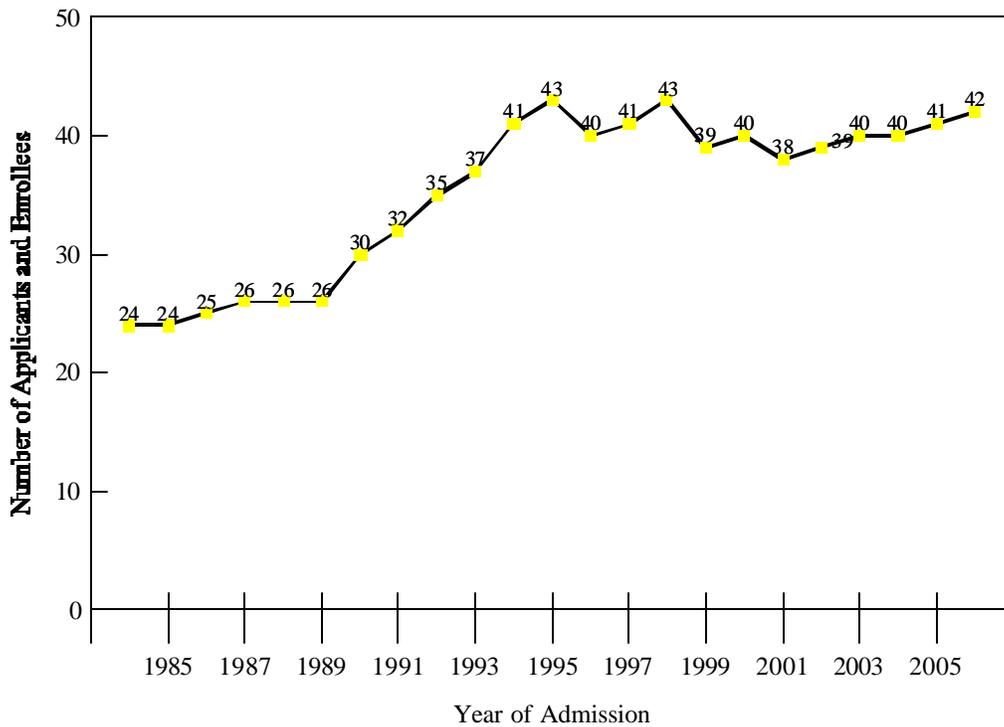
Figure 12. Applicants and Students Enrolled by Region, 2006-2007



Trends in First Year P.A. Student Enrollment, 1984 Through 2006

The number of first year students enrolled in P.A. programs for the twenty-three year period from 1984 through 2006 is shown in Table 52 (next page) and Figure 13.

Figure 13. Trends of Students Enrolled: 1984 Through 2006



There was a systematic increase in enrollees from 1984 through 1995. Since then, the mean number enrolled has varied around a mean of 40 students/program. The average number of enrollees over the twenty-three year period is 35.3 students/program.

Table 52. First Year P.A. Students Enrolled, 1984 Through 2006

Academic <u>Year</u>	Mean Number <u>Enrolled</u>	<u>(N)</u>
1984-1985	24.1	43
1985-1986	24.3	42
1986-1987	24.9	47
1987-1988	25.6	47
1988-1989	25.9	46
1989-1990	26.1	46
1990-1991	29.6	49
1991-1992	32.2	47
1992-1993	35.0	57
1993-1994	37.0	55
1994-1995	41.4	58
1995-1996	42.9	71
1996-1997	39.6	76
1997-1998	40.5	91
1998-1999	42.6	92
1999-2000	39.3	105
2000-2001	40.1	101
2001-2002	38.4	105
2002-2003	38.5	99
2003-2004	39.9	98
2004-2005	40.2	104
2005-2006	40.8	105
<u>2006-2007</u>	<u>42.3</u>	<u>100</u>
23-Yr. Mean	35.3	73

The mean number and relative proportion of male and female students enrolled in P.A. programs over the past twenty-four years are shown in Table 53 (next page). The proportion of female and male students remained relatively constant from 1983-1995, average of 61% and 39% respectively. Since then, the percentage of female students has increased to 72% and male students have decreased to 28%. These figures include part-time students.

Table 53. First-Year Class Enrollment, 1983 Through 2006

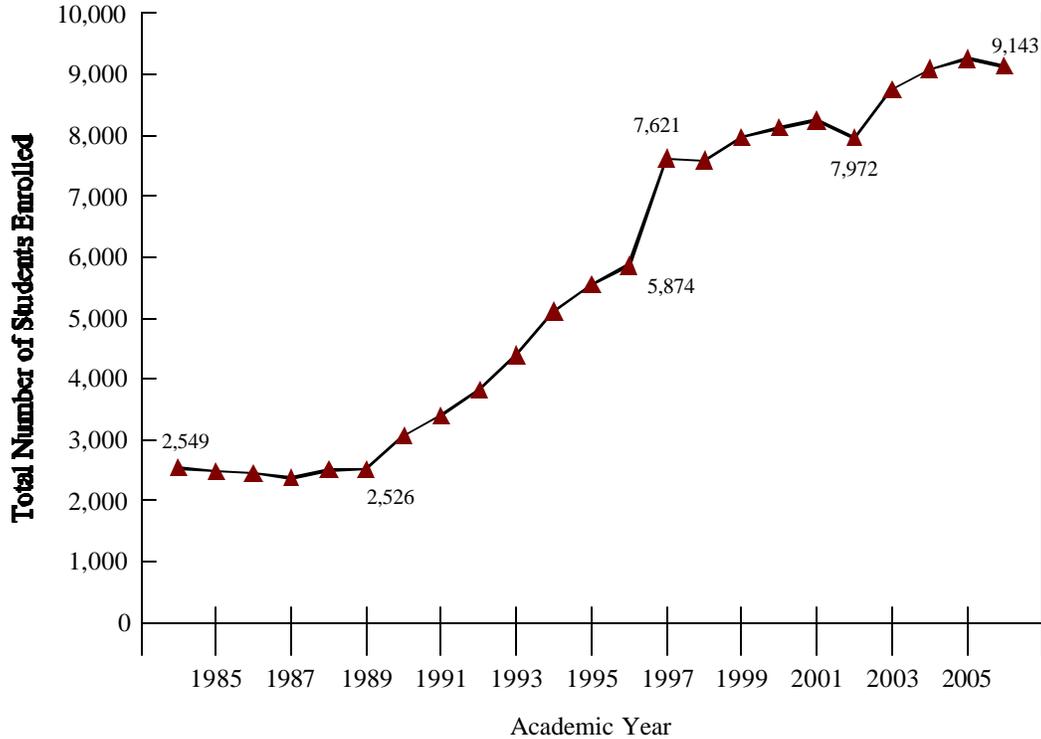
Academic Year	N	Female		Male		Total	
		Mean	(%)	Mean	(%)	Mean	N
1983-1984	39	13.6	58.4%	9.7	41.6%	24.0	43
1984-1985	39	14.6	61.6%	9.1	38.4%	24.1	43
1985-1986	42	15.3	63.0%	9.0	37.0%	24.3	41
1986-1987	44	15.5	62.2%	9.4	37.8%	24.9	47
1987-1988	47	15.7	61.6%	9.9	38.4%	25.6	47
1988-1989	46	16.2	62.3%	9.8	37.7%	25.9	46
1989-1990	46	16.4	62.8%	9.7	37.2%	26.1	46
1990-1991	47	16.3	55.1%	13.3	44.9%	29.6	49
1991-1992	47	19.4	60.2%	12.8	39.8%	32.2	47
1992-1993	55	20.7	59.8%	13.9	40.2%	35.0	56
1993-1994	55	22.2	61.5%	13.9	38.5%	37.0	55
1994-1995	60	24.4	60.2%	16.1	39.8%	41.1	55
1995-1996	71	22.8	58.2%	16.4	41.8%	39.2	71
1996-1997	77	23.5	61.4%	14.8	38.6%	38.3	77
1997-1998	95	24.4	61.9%	15.0	38.1%	39.4	95
1998-1999	91	25.0	62.5%	15.0	37.5%	40.0	91
1999-2000	103	24.0	62.8%	14.2	37.2%	40.2	103
2000-2001	102	24.8	64.9%	13.4	35.1%	38.2	102
2001-2002	105	26.7	68.1%	12.5	31.9%	39.2	105
2002-2003	103	24.7	69.6%	10.8	30.4%	35.5	103
2003-2004	108	26.9	70.4%	11.3	29.6%	38.2	108
2004-2005	104	28.4	70.6%	11.8	29.4%	40.2	104
2005-2006	105	29.8	73.0%	11.0	27.0%	40.8	105
<u>2006-2007</u>	<u>100</u>	<u>30.5</u>	<u>72.1%</u>	<u>11.8</u>	<u>27.9%</u>	<u>42.3</u>	<u>100</u>
24-Yr Mean	72	21.7	63.5%	12.3	36.5%	34.2	72

Total Enrollment in P.A. Programs

Figure 14 (next page) illustrates the trends in total student enrollment from 1984 through 2006. Estimates of total enrollment are based on summing mean values for enrollment in the 1st, 2nd and 3rd year classes, then multiplying by the number of programs represented. For the 100 programs we estimate total enrollment to be 9,143 in 2006. (The calculations were as follows, 1st yr. 100x42.3=4,230, 2nd yr. 101x38.5=3,889 and 3rd yr. 32 x 32.0=1,024). If one would estimate 1st year enrollment based upon 134 programs, first year enrollment would be 134x42.3=5,668 an increase of 1,438 students.

Total enrollment remained relatively constant from 1984 through 1989. Subsequently, there had been a linear and relatively steep sustained increase until 1996. In 1997, there was a dramatic increase of 30%. Since then, there has been a 20% increase. In addition, since 1984 the number of P.A. programs has changed as follows: 53 (1984); 51 (1985); 49 (1986); 50 (1987); 51 (1988 and 1989); 55 (1990 and 1991) 59 (1992); 63 (1993); 67 (1994); 81 (1995); 89 (1996); 104 (1997); 107 (1998); 120 (1999); 126 (2000), 130 (2001), 132 (2002), 133 (2003), 134 (2004, 2005 and 2006).

Figure 14. Trends in Student Enrollment: 1984 Through 2006



First-Year Students Enrolled by Age

The age distribution of enrolled students for the first-year class is shown in Table 54. The data are expressed as the mean number of individuals per program within each of the age categories examined. Over one-fourth of the students enrolled in the first-year class were over 30 years of age; over one-half were between the ages of 20 and 26 and 2.3% were under 20 years of age.

Table 54. Enrollees by Age, Class of 2006-2007

<u>Age</u>	<u>Number Enrolled</u>	
	<u>Mean</u>	<u>(%)</u>
Under 20	1.0	2.3%
20-23	12.4	28.1%
24-26	12.5	28.3%
27-29	6.7	15.2%
30-33	5.0	11.3%
Over 33	<u>6.5</u>	<u>14.7%</u>
Total	44.1	100.0%

(N=93)

(N=100)*

* Number of programs reporting.

First-Year Students Enrolled by Age and Consortia Region

The distribution of students enrolled in the 2006-2007 class by age and consortia region is shown in Table 55 (next page). The table reports the percentage of students per program (N=92 programs) in each age category. Students enrolled in those programs located in the Eastern region tended to be younger than those in other

regions, 45.4% were 23 years of age or less. Conversely, students in the Western region were notably older than P.A. students in other regions, 36% were over 30 years of age.

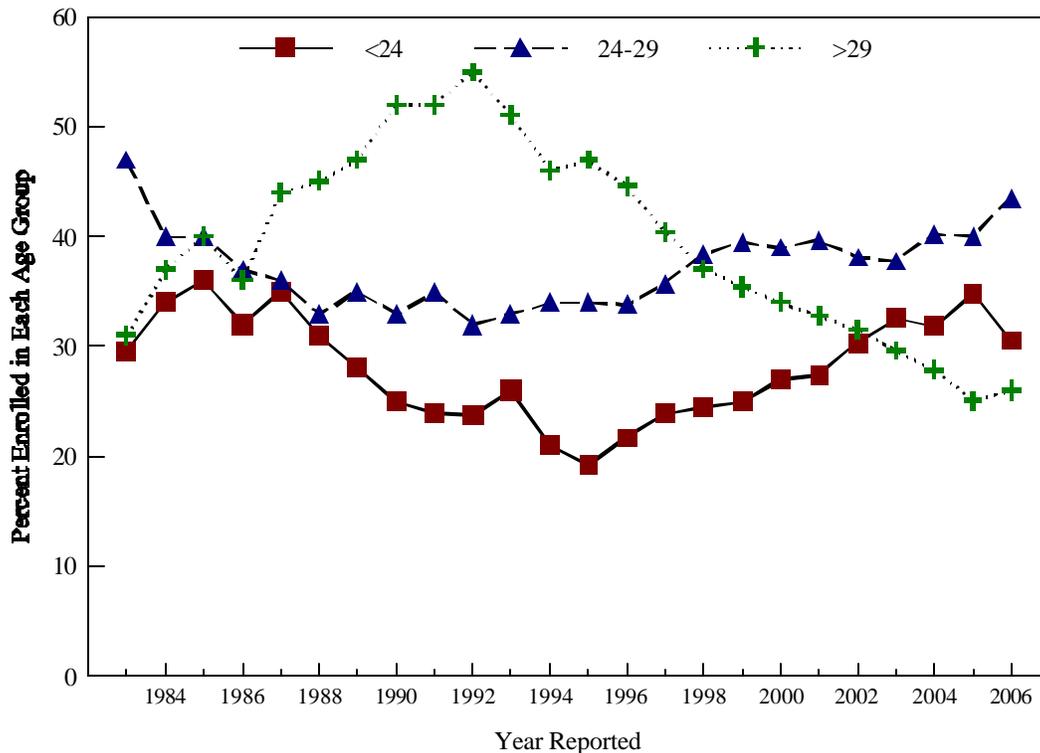
Table 55. P.A. Student Enrollment by Age and Region, Class of 2006-2007

	Age at Application					
	< 20	20-23	24-26	27-29	30-33	>33
Consortia	< 20	20-23	24-26	27-29	30-33	>33
<u>Region</u>	<u>(%)</u>	<u>(%)</u>	<u>(%)</u>	<u>(%)</u>	<u>(%)</u>	<u>(%)</u>
Northeastern	4.3%	35.9%	24.2%	9.0%	10.2%	16.3%
Eastern	5.6%	39.8%	27.5%	11.4%	6.0%	9.6%
Southeastern	0.1%	35.6%	31.0%	14.0%	8.5%	10.7%
Midwestern	4.9%	25.0%	31.6%	13.4%	10.2%	14.8%
Heartland	0.0%	21.7%	25.4%	19.6%	17.9%	15.4%
Western	0.0%	13.3%	27.9%	22.7%	15.4%	20.6%
Total	2.3%	28.2%	28.3%	15.2%	11.3%	14.7%

Trends in Enrollment by Age

Trends in the age of enrolled students from 1983 to 2006 are shown in Figure 15. The data were grouped into the following three age categories: under 24 years of age, those between 24 and 29 years and those over 29 years of age. The proportion of enrollees less than 24 years of age increased to 34.8% in 2005, from a pattern of decrease through 1995. Those between the ages of 24 and 29 initially decreased from 1983 to 1992; since then, there has been a gradual increase to the current value of 43.5%. The enrollment of students that were over 29 years of age had systematically increased over time beginning at 32% of the enrollees in 1983, peaking in 1992 (56%) and then decreasing to the current level of 26% of enrollees. This is the fourth year that the percentage of students over 29 years of age was less than both under 24 years of age and the 24 to 29 year old group.

Figure 15. Trends in Enrollee Age: 1983 Through 2006



Average Age of First-Year Enrolled Students

The survey included questions asking the average age of currently enrolled full- and part-time students. As a result of these questions, the average full-time student age was 26.7 and the average age for the part-time student was 28.6.

Table 56 lists average ages of these categories by consortia region. The Western region had the highest average age of full-time students (29.0). The Eastern region had the lowest average age of full-time students (25.5).

Table 56. Average Age of Enrollees by Region

Consortia Region	Enrollees Full-Time		Enrollees Part-Time	
	<u>N</u>	<u>Average Age</u>	<u>N</u>	<u>Average Age</u>
Northeastern	20	26.0	2	30.5
Eastern	12	25.5	1	-----
Southeastern	20	26.3	1	-----
Midwestern	18	26.5	2	26.5
Heartland	10	27.1	1	-----
Western	<u>16</u>	<u>29.0</u>	<u>1</u>	-----
Total	96	26.7	8	28.6

First-Year Students Enrolled by Ethnicity

The ethnicity of students enrolled in the first-year class is shown in Table 57. The data are expressed as the mean number and percentage of enrollees per program from each ethnicity category. Over three-fourths of the enrolled students (76.7%) were White/Non-Hispanic; 5.3% were Black/African-American, 6.5% were Latino/Hispanic, 5.3% were Asian.

Table 57. Students Enrolled by Ethnicity

<u>Ethnicity</u>	<u>Number Enrolled</u>		<u># of Programs</u>
	<u>Mean</u>	<u>(%)</u>	<u>w/o Minorities</u>
	(N=90)		(N=90)
White/Non-Hispanic	33.0	76.7%	0
Black/African-American	2.3	5.3%	23
Latino/Hispanic/Mex. Am.	2.8	6.5%	29
Asian	2.3	5.3%	26
Asian Subpopulation	0.5	1.2%	64
Native Hawaiian/Other P.I.	0.2	0.5%	83
American Ind./Alaskan	0.3	0.7%	74
Other	<u>1.6</u>	<u>3.7%</u>	<u>62</u>
Total (N=100)	42.3	100%	3

Twenty-three of the 90 program respondents (25.6%) did not enroll any Black/African-American students and twenty-nine programs did not enroll any Hispanic students. Three programs (3.3%) did not enroll any type of minority student in 2006.

Ethnic Representation of First Year Enrollees by Consortia Region

The mean number and proportion of P.A. students enrolled in the first-year class on the basis of both ethnicity and consortia region is in Table 58.

Table 58. Enrollees by Ethnicity and Consortia Region

<u>Consortia Region</u>	<u>Enrollees</u>			
	<u>White</u>		<u>Non-White</u>	
	<u>Mean</u>	<u>%</u>	<u>Mean</u>	<u>%</u>
Northeastern	24.1	64.7%	13.1	35.3%
Eastern	39.5	82.4%	8.5	17.6%
Southeastern	37.8	81.5%	8.6	18.5%
Midwestern	29.0	90.3%	3.1	9.7%
Heartland	41.8	76.1%	13.1	23.9%
Western	33.1	70.3%	13.9	29.7%
Total	33.0	76.7%	10.0	23.3%

For purposes of comparing across regions, minorities were grouped into a single category and designated non-white. There was considerable variation in the proportion of minorities enrolled in programs across regions. The Northeastern region enrolled the largest percentage (35.3%) of non-white students. Programs in the Midwestern region had the fewest number of non-white enrollees (9.7%).

The number and percent of programs reporting no minority students enrolled in the first-year class is shown in Table 59. Three programs had no minority students enrolled.

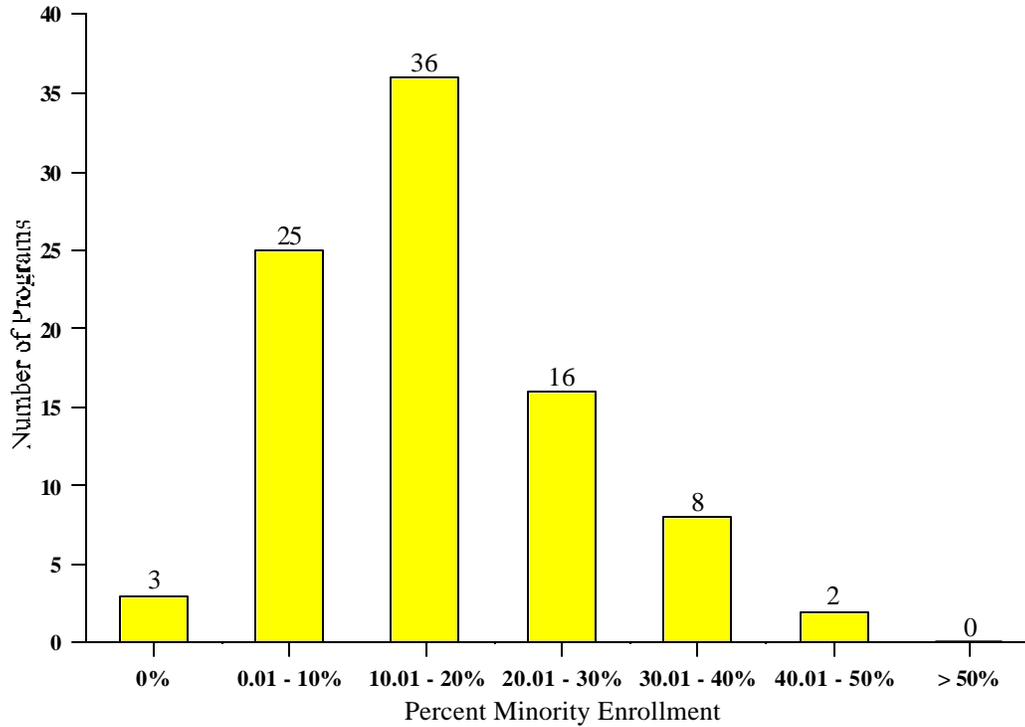
Table 59. Number of Programs with No Minority Enrollment by Consortia Region

<u>Consortia Region</u>	<u>N</u>	<u># of Programs</u>	<u>(%)</u>
Northeastern	19	0	0.0%
Eastern	11	0	0.0%
Southeastern	17	0	0.0%
Midwestern	17	3	17.6%
Heartland	9	0	0.0%
Western	17	0	0.0%
Total	90	3	3.3%

Number of Programs versus Percent First Year Minority Student Enrollment

Figure 16 (next page) represents the number of programs with certain percentages of minority enrollment. There are 20 programs that have a larger percentage of minority enrollment than the mean of 23.3%; 70 programs have less. The average minority enrollment for programs with greater than 20% or more is 29.3%; for programs with less than 20% minority enrollment, 11.0%.

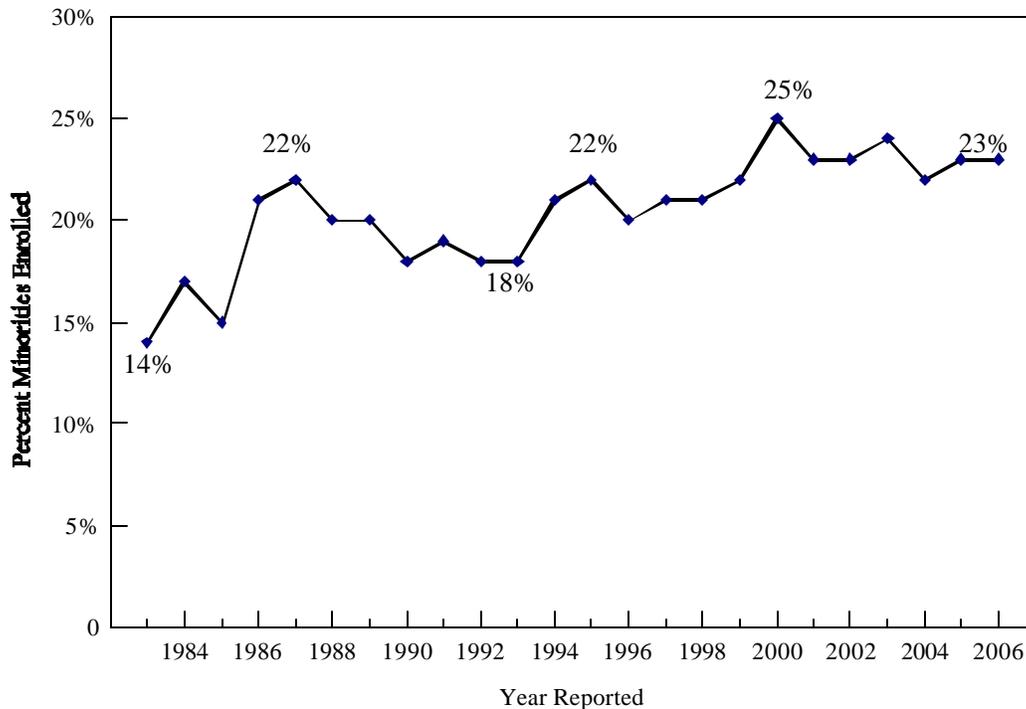
Figure 16. Number of Programs vs. Percentage of Minority Enrollment



Trends in First-Year Minority Student Enrollment, 1983 Through 2006

The proportion of minority and non-minority students enrolled in P.A. programs over a twenty-four year period (1983-1984 through 2006-2007) is shown in Table 60 (next page) and Figure 17. The proportion of non-white students in the first-year class fluctuated between 14% in 1983 and 25% in 2000-2001.

Figure 17. Trends in Minority Student Enrollment: 1983 Through 2006



Expressed differently, the number of minority students has more than doubled from a mean of 4.0/program in 1983 to 10.0/program in 2006.

Table 60. Ethnicity of P.A. Students Enrolled from 1983 Through 2006

Academic Year	N	White		Non-White		First Yr. Enrollment
		Mean	%	Mean	%	
1983-1984	39	20.7	86.2%	4.0	13.8%	24.0
1984-1985	39	20.3	83.4%	4.1	16.6%	24.5
1985-1986	41	20.9	85.3%	3.6	14.7%	24.6
1986-1987	47	19.6	78.8%	5.3	21.1%	24.9
1987-1988	47	19.7	77.7%	5.9	22.3%	25.6
1988-1989	46	20.8	79.7%	5.3	20.3%	25.9
1989-1990	46	20.9	80.1%	5.2	19.9%	26.1
1990-1991	48	24.6	82.3%	5.3	17.7%	29.9
1991-1992	47	26.0	81.0%	6.1	19.0%	32.1
1992-1993	56	26.9	82.5%	5.7	17.5%	32.6
1993-1994	55	29.3	82.3%	6.3	17.7%	35.6
1994-1995	58	33.2	77.5%	8.8	20.9%	42.0
1995-1996	69	32.4	77.7%	9.3	22.3%	41.5
1996-1997	76	31.3	79.6%	8.0	20.4%	39.6
1997-1998	91	32.4	79.2%	8.5	20.8%	40.6
1998-1999	89	32.9	78.9%	8.8	21.1%	42.6
1999-2000	103	30.7	77.9%	8.7	22.1%	39.3
2000-2001	102	30.2	75.1%	10.0	24.9%	40.1
2001-2002	105	29.0	77.3%	8.5	22.7%	38.0
2002-2003	99	29.8	77.4%	8.7	22.6%	38.5
2003-2004	98	30.1	75.6%	9.7	24.4%	39.9
2004-2005	102	33.1	77.9%	9.4	22.1%	40.2
2005-2006	92	32.8	77.2%	9.7	22.8%	40.8
<u>2006-2007</u>	<u>100</u>	<u>33.0</u>	<u>76.7%</u>	<u>10.0</u>	<u>23.3%</u>	<u>42.3</u>
24-yr. Mean	71	27.5	79.5%	7.3	20.5%	34.6

First-year minority student enrollment over twenty-four years has averaged 20.5% per year (mean of 7.3 students/program).

Academic Characteristics of First-Year P.A. Students

The academic profile of students at the time of enrollment are shown in Table 61 (next page). Over three-fourth (82.5%) of the students enrolled in 2006 had earned at least a baccalaureate degree (76% as their highest degree) while less than one-fifth (12.7%) entered with no academic degree. Only 4.8% of the enrollees had earned an associate level degree prior to entry. Of the full-time students, 6.4% were admitted with a graduate-level degree, predominantly a master's degree (5.4%).

Table 61. Academic Characteristics of P.A. Students Enrolled in 2006

Highest Academic Credential Earned	Full-Time		Part-Time		Total	
	Mean	%	Mean	%	Mean	%
No Academic Degree	5.2	12.7%	0.1	11.1%	5.3	12.7%
Associate Degree	2.0	4.9%	0.0	0.0%	2.0	4.8%
Baccalaureate Degree	31.0	76.0%	0.7	77.8%	31.7	76.0%
Masters Degree	2.2	5.4%	0.1	11.1%	2.3	5.5%
Doctoral Degree	0.4	1.0%	0.0	0.0%	0.4	1.0%
Total	40.8	100.0%	0.9	100.0%	41.7	100.0%

Academic Characteristics of First-Year Enrolled P.A. Students by Consortia Region

A comparison of the academic degrees earned by entering students across regions is shown in Table 62. The data are expressed as the percentage of students per program in each degree category. Each of the regions had more than 60% of students entering with a baccalaureate degree. The Northeastern region had the largest number of enrollees with no degree (26.3%). The Southeastern region had 7.7% of its enrollees with a master’s degree.

Table 62. Academic Characteristics of Enrollees by Region, Class of 2006-2007

Consortia Region	N	Degree Characteristics					Total Mean
		No Degree	Associate Degree	Bacc. Degree	Masters Degree	Doctoral Degree	
Northeastern	20	26.3%	4.1%	63.3%	4.3%	2.0%	35.7
Eastern	13	21.6%	1.8%	71.4%	4.0%	1.2%	45.9
Southeastern	16	4.3%	4.6%	83.0%	7.7%	0.4%	42.3
Midwestern	18	8.9%	2.3%	82.1%	6.2%	0.5%	34.2
Heartland	10	12.7%	10.2%	72.7%	4.0%	0.4%	52.0
Western	16	3.8%	6.2%	81.9%	6.4%	1.7%	47.6
Total	93	12.7%	4.8%	76.0%	5.5%	1.0%	41.7

An analysis of grade point average (GPA) and mean number of months of health care experience by consortia region is shown in Table 63.

Table 63. Grade Point Average and Mean Number of Months of Health Care Experience by Region, Class of 2006-2007

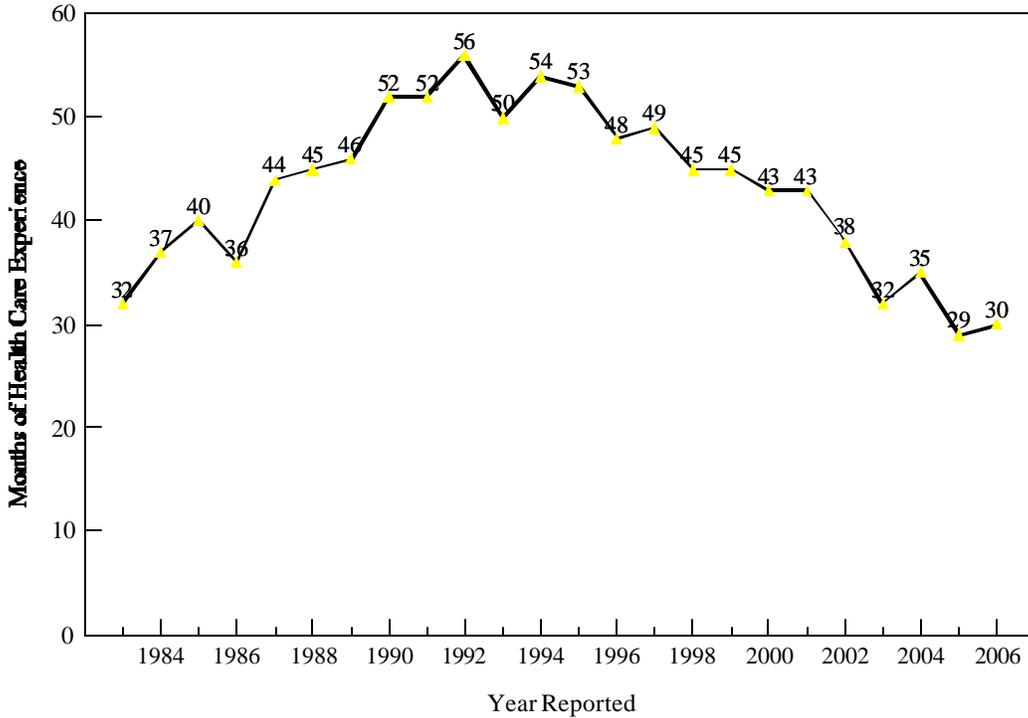
Consortia Region	Grade Point Average			Months of H.C.E.		
	N	Mean	S.D.	N	Mean	S.D.
Northeastern	21	3.38	0.14	13	31.1	28.6
Eastern	12	3.39	0.14	9	28.4	37.0
Southeastern	19	3.38	0.10	17	22.8	17.4
Midwestern	18	3.44	0.18	18	34.5	32.4
Heartland	9	3.47	0.12	9	24.5	12.7
Western	16	3.36	0.21	10	41.3	37.6
Total	95	3.40	0.15	76	30.3	28.4

The cumulative GPA of entering students ranged from 2.90 to 3.70 with a mean of 3.40. Programs in the Heartland regions reported the highest GPA for entering students. The average number of months of health related

experience prior to admission varied extensively across regions (range of 0-132 months). For example, students in programs located in the Southeastern region had completed an average of 22.8 months of health-related experience while those entering programs in the Western regions had 41.3 months of health care experience. The average for all programs was less than three years (30.3 months).

As shown in Figure 18, the months of health care experience systematically increased from 1983 through 1992 to a high of 56 months. Since that time, H.C.E. has had an overall decrease to a low of 29 months in 2005.

Figure 18. Trends in Health Care Experience of Enrollees: 1983 Through 2006



SECTION IV. GRADUATE INFORMATION

Number and Attrition of Students by Gender

The number and gender of students graduating during the 2006-2007 academic year, and those withdrawing and decelerating prior to graduation, are shown in Table 64. The mean number of 2006 graduates was 36.6/program and represented 89.5% of the students originally enrolled in this class. We estimate that there was a total of 4,831 P.A.'s graduated from all programs graduating class in 2006 (132 programs x 36.6/program). As in previous years, the majority (71.9%) of 2006 graduates were women.

Table 64. Number of Graduates and Students Withdrawn or Decelerated in 2006-2007 by Gender

<u>Gender</u>	<u>Number Graduated</u>		<u>Attrition of Students</u>		<u>Students Decelerated</u>	
	<u>Mean</u>	<u>%</u>	<u>Mean</u>	<u>%</u>	<u>Mean</u>	<u>%</u>
Female	26.3	91.3%	1.3	4.5%	1.2	4.2%
Male	10.3	85.1%	0.7	5.8%	1.1	9.1%
Total/Program	36.6	89.5%	2.0	4.9%	2.3	5.6%

* Proportion withdrawing or decelerating was calculated as:

$$\frac{\sum_{P=1}^N (G_p W_p \text{ or } D_p)}{\sum_{P=1}^N (G_p + W_p + D_p)}$$

where: G_p = number graduated from program "p".
 W_p = number withdrew from program "p".
 D_p = number decelerated from program "p".

The mean number of students withdrawing prior to graduation was 2.0 students/program for an overall attrition rate of 4.9%. The attrition rate for males was higher than the attrition rate for females, 5.8% and 4.5% respectively. The attrition rate is lower than in 2005 (6.0%) and lower than the average of 7.3% over the previous twenty-three years.

On average, the rate of deceleration was 5.6%. A decelerated student was defined as one who was enrolled, experienced academic, personal, and/or financial difficulty, but remained a student in the program on a part-time basis and/or was on a temporary leave of absence.

The reasons cited for withdrawal are presented in Table 65. There were a total of 161 students withdrawing from the 2006 graduating class (as reported by 73 programs). The most common reason for withdrawal was academic (60.2%). It should be noted that program staff provided the reasons cited for withdrawal, rather than the students involved.

Table 65. Reasons for Student Withdrawal from the Program

<u>Reason Given</u>	<u>N</u>	<u>(%)</u>	<u>Reason Given</u>	<u>N</u>	<u>(%)</u>
Academic	97	60.2%	Career Change	3	1.9%
Personal	56	34.8%	Medical	0	0.0%
Financial	2	1.2%	Other	3	1.9%
	Total	161		161	100.0%

Attrition Rates of Students by Consortia Region

The mean number of graduates, attrition rates, and students decelerated by consortia region are shown in Table 66. Programs in the Heartland region had the largest graduating class with a mean of 46.2 students per program, while programs in the Midwestern region had the smallest graduating class (30.8/program).

Table 66. Number Graduated, Withdrawn and Decelerated by Consortia Region

Consortia <u>Region</u>	<u>N</u>	Mean # <u>Graduated</u>	Mean and Rate		Mean and Rate	
			<u>of Attrition</u>		<u>of Deceleration</u>	
Northeastern	18	31.3	1.8	5.2%	1.4	4.1%
Eastern	9	38.6	3.6	8.2%	1.4	3.2%
Southeastern	11	40.4	2.1	4.8%	1.2	2.7%
Midwestern	14	30.8	1.2	3.6%	1.2	3.6%
Heartland	6	46.2	4.0	6.2%	14.3	22.2%
Western	<u>14</u>	<u>40.8</u>	<u>1.3</u>	<u>3.0%</u>	<u>0.9</u>	<u>2.1%</u>
Total	72	36.6	2.0	4.9%	2.3	5.6%

The highest attrition rates occurred in those programs located in the Eastern region (8.2%) while programs in the Western region had the lowest attrition rates (3.0%). In comparison to the previous year, the number graduated/program in 2006 has increased (6.1%). The rate of attrition decreased in five of the six regions (all but Eastern); deceleration increased in two regions (Southeastern and Heartland). Programs in the Heartland region reported the largest rate of deceleration (22.2%), while programs in the Western region had the lowest rate of deceleration (2.1%).

The reasons for withdrawal by region are shown in Table 67. Programs in the Southeastern region had the highest percentage of students withdraw for academic reasons (70.4%) while programs in the Heartland region cited academic reasons for withdrawal 38.5% of the time. In the Heartland region, 61.5% of the programs withdrawals were for personal reasons as compared with 24.4% in the Northeastern region.

Table 67. Reasons for Withdrawal by Consortia Region

Consortia <u>Region</u>	Reasons for Withdrawal from Program						<u>Total</u>
	<u>Academic</u>		<u>Personal</u>		<u>Other</u>		
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	
Northeastern	28	68.3%	10	24.4%	3	7.3%	41
Eastern	18	56.3%	12	37.5%	2	6.3%	32
Southeastern	19	70.4%	7	25.9%	1	3.7%	27
Midwestern	9	60.0%	5	33.3%	1	6.7%	15
Heartland	10	38.5%	16	61.5%	0	0.0%	26
Western	<u>13</u>	<u>65.0%</u>	<u>6</u>	<u>30.0%</u>	<u>1</u>	<u>5.0%</u>	<u>20</u>
Total	97	60.2%	56	34.8%	8	5.0%	161

Graduation, Attrition, and Deceleration of Students by Age

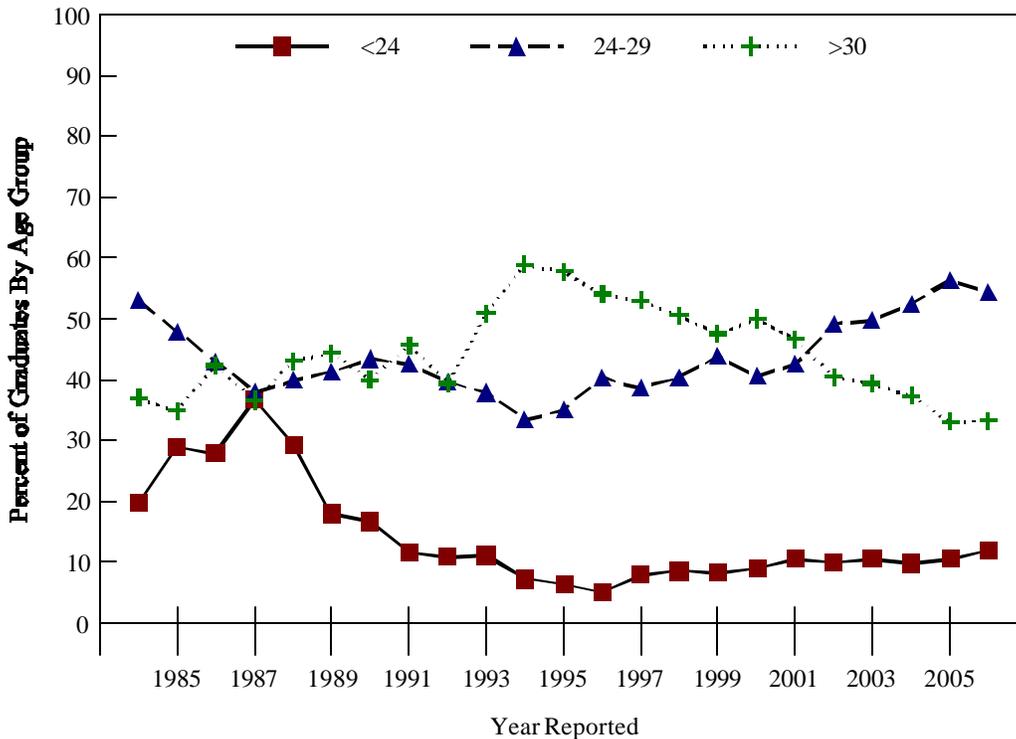
The mean number of graduates, attrition rates, and students decelerated for each age category is shown in Table 68. Almost one-half (44.3%) of the graduates were between the ages of 20 and 26 upon graduation and 33.3% were 30 years of age or older. Attrition was highest for those over 33 years of age. Deceleration rates were also highest for students over 33 years of age and least for those between 20 and 23.

Table 68. Number Graduated, Decelerated and Attrition Rates of 2006 Graduates by Age

<u>Age at Graduation</u>	<u>N</u>	<u>Number Graduated</u>		<u>Withdrew Prior To Graduation</u>		<u>Attrition Rate</u>	<u>Students Decelerated</u>	
		<u>Mean</u>	<u>%</u>	<u>Mean</u>	<u>%</u>	<u>%</u>	<u>Mean</u>	<u>Rate</u>
Under 20	72	0.0	0.0%	0.0	0.0%	0.0%	0.0	0.0%
20-23	72	4.4	12.1%	0.2	10.5%	4.3%	0.1	2.1%
24-26	72	11.7	32.2%	0.4	21.1%	3.2%	0.4	3.2%
27-29	72	8.1	22.3%	0.3	15.8%	3.4%	0.5	5.6%
30-33	72	5.3	14.6%	0.3	15.8%	4.9%	0.5	8.2%
Over 33	72	6.8	18.7%	0.7	36.8%	8.5%	0.7	8.5%
Total/Program	72	36.6	100%	2.0	100.0%	4.9%	2.3	5.6%

Figure 19 shows the trends in age from 1984 through 2006. The proportion of recent graduates in the youngest age group (<24) has generally decreased over time, with a slight increase over the previous ten years. Conversely, the middle age group (24 - 29) has increased 62.2% since 1994. The graduates in the older age group (>30) have decreased 43.6% since 1994.

Figure 19. Trends in the Age of Graduates: 1984 Through 2006



The mean number of graduates, withdrawals, decelerated students and attrition rates for the 2006 graduating class by ethnicity is shown in Table 69. The majority of the recent graduates were White/Non-Hispanic (76%), less than one-fourth (24%) were minorities.

Table 69. Number and Attrition Rates of 2006 Graduates by Ethnicity

<u>Ethnicity</u>	<u>N</u>	<u>Mean Number Graduated</u>		<u>Withdrew Prior to Graduation</u>		<u>Attrition Rate</u>	<u>Students Decelerated</u>	
		<u>Mean</u>	<u>%</u>	<u>Mean</u>	<u>%</u>	<u>%</u>	<u>Mean</u>	<u>Rate</u>
White/Non-Hispanic	72	29.1	76.0%	1.3	65.0%	4.1%	1.3	4.1%
Black/African-Amer.	72	1.8	4.7%	0.3	15.0%	12.0%	0.4	16.0%
Latino/Hispanic/Mex. Am.	72	2.5	6.5%	0.1	5.0%	3.4%	0.3	10.3%
Asian	72	1.8	4.7%	0.2	10.0%	9.1%	0.2	9.1%
Asian Subpopulations	72	0.8	2.1%	0.0	0.0%	0.0%	0.0	0.0%
Native Haw./Other P.I.	72	0.1	0.3%	0.0	0.0%	0.0%	0.0	0.0%
American Ind./Alaskan	72	0.4	1.0%	0.0	0.0%	0.0%	0.0	0.0%
Other/Unknown	72	1.8	4.7%	0.1	5.0%	5.0%	0.1	5.0%
Total/Program	72	36.6	100.0%	2.0	100.0%	4.9%	2.3	5.6%

Within the minority groups graduating, 19.6% were Black/African-American, 27.2% were Latino/Hispanics, 19.6% were Asian and the remainder were classified as Asian Subpopulation, Alaskan/Native American or Other/Unknown. Fifty-seven percent (N=41) of the 72 programs reported at least one Black/African-American among their 2006 graduates. Forty-four (61%) programs also graduated at least one Latino/Hispanic.

The Black/African-American students had the highest rate of attrition (12.0%), followed by Asian students (9.1%). The White/Non-Hispanics had an attrition rate of 4.1%. Proportionately, minority students were more likely to be decelerated, particularly the Black/African-American students (16.0%) as compared to White students (4.1%).

Trends in Student Attrition: 1984 Through 2006

Figure 20 (next page) shows the relative attrition rates from 1984 through 2006 for all students and for white and non-white students. Attrition rates have averaged 7.3% over the past twenty-three years, ranging from a high of 14% in 1988 to a low of 3.9% in 1999. The 2006 attrition rate for white students was 4.1% and 6.4% for non-white students; the latter represents a decrease from 2005.

Gender and Ethnicity of 2006 P.A. Graduates by Consortia Region

The mean number and proportion of 2006 graduates by gender, ethnicity, and consortia region are shown in Table 70 (next page). Proportionately, more minority students graduated from programs in the Western region (38%) than from programs located in the Midwestern region (8.4%). The Heartland region had the highest proportion of male graduates (42.6%) and the Eastern region the highest proportion of female graduates (78.3%).

Figure 20: Trends in Student Attrition: 1984 Through 2006

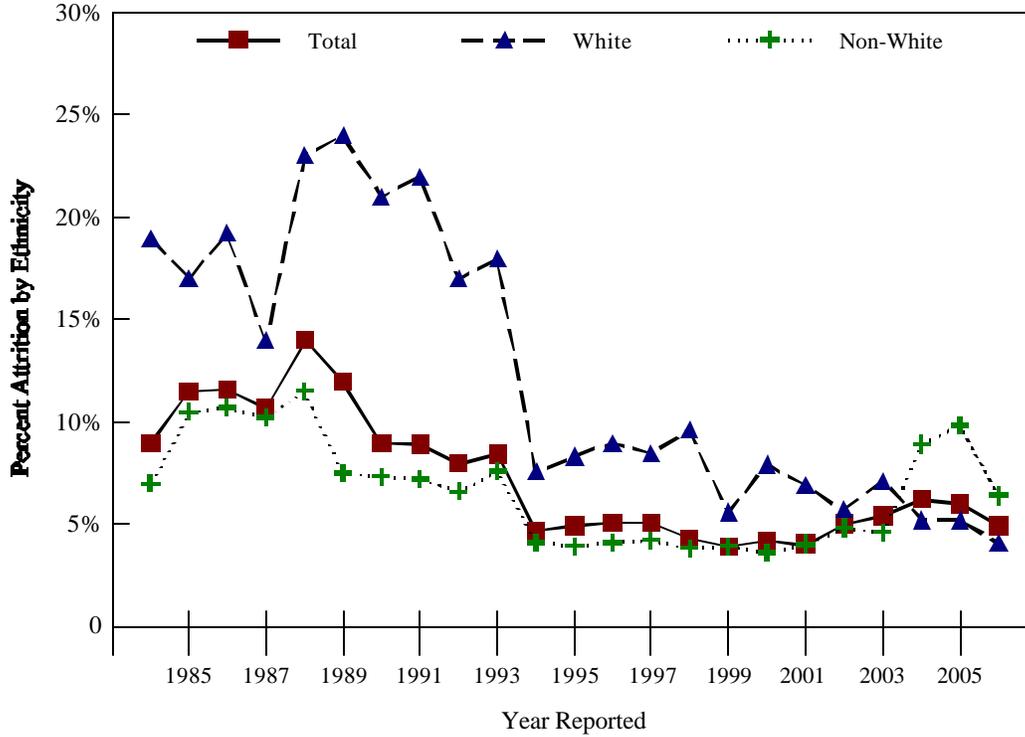


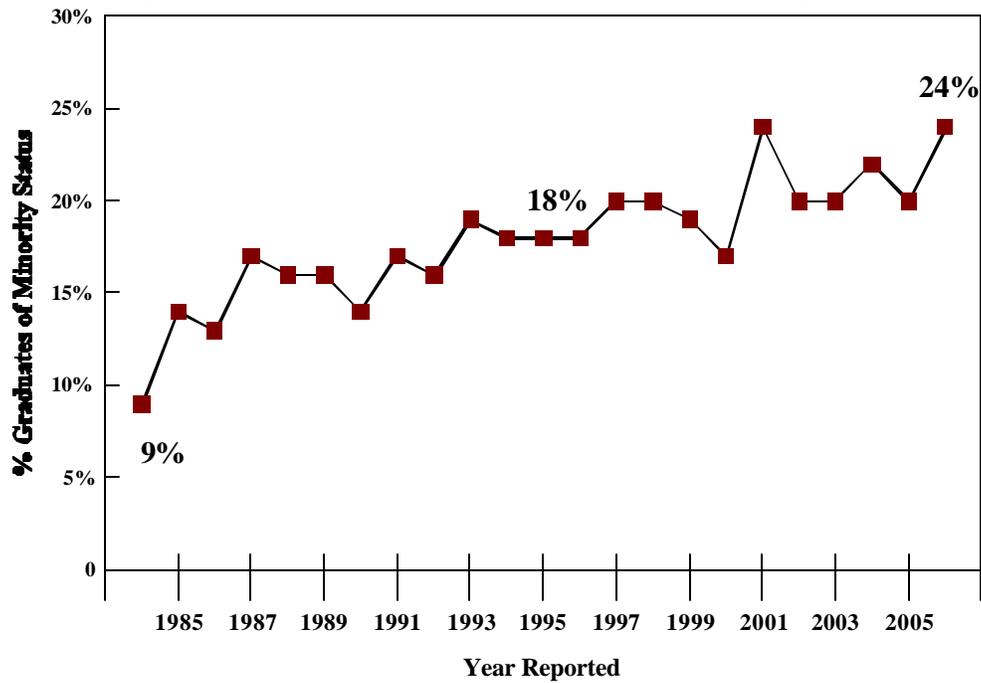
Table 70. 2006 Graduates by Gender, Ethnicity, and Consortia Region

Consortia Region	N	Mean # of Graduates	Gender		Ethnicity				
			Male	Female	White	Black	Hispanic	Asian	Other
Northeastern	18	31.3	23.8%	76.2%	72.4%	6.8%	5.9%	7.3%	7.7%
Eastern	9	38.6	21.6%	78.3%	86.8%	3.2%	0.9%	4.4%	4.7%
Southeastern	11	40.4	23.9%	76.1%	83.1%	4.7%	4.5%	3.6%	4.1%
Midwestern	14	30.8	26.2%	73.8%	91.6%	1.4%	2.1%	1.6%	3.3%
Heartland	6	46.2	42.6%	57.4%	68.4%	9.5%	8.6%	3.8%	9.7%
Western	14	40.8	33.8%	66.2%	61.8%	2.6%	13.6%	6.1%	15.9%
Total	72	36.6	28.1%	71.9%	76.0%	4.7%	6.5%	4.7%	8.1%

Trends in the Graduation of Minorities

The graduation of minority P.A.'s has been monitored since 1984. Figure 21 (next page) shows the proportion of non-white P.A. graduates over the past twenty-three years. During the twenty-three year period for which data was available, the graduation of non-white students averaged 17.9%, ranging from a high of 24% this year to a low of 9.0% in 1984. The reader is referred to Figure 17 concerning enrollment of minority students, which over the past twenty-four years, has averaged 20.5% (Table 60).

Figure 21. Trends in Minority P.A. Graduates: 1984 Through 2006



Employment Status of 2006 P.A. Graduates

A summary of the employment status of the recent graduates, as reported by 65 programs, is shown in Table 71. It should be noted that the time elapsed between a program's graduation date and the date the survey was completed varied.

Table 71. Employment Characteristics of 2006 P.A. Graduates

<u>Employment Status</u>	<u>Mean Number Per Program</u>	<u>S.D.</u>	<u>Relative Frequency</u>
Employed:			
As a P.A.	24.8	10.4	71.3%
Not as a P.A.	0.1	0.3	0.3%
Unemployed	1.1	2.3	3.2%
Continued with Education	0.4	0.8	1.1%
Unknown	<u>8.4</u>	<u>13.6</u>	<u>24.1%</u>
Total (N=65)	34.8	14.1	100.0%

The majority (71.3%) of recent graduates were employed as a physician assistant, a 5.5% decrease from 2005 graduates (67.6%). Over one-fourth of the graduates were either unemployed or their employment status was unknown.

Number of Recent Graduates by State

The number of 2006 graduates, by state, is shown in Table 72 and includes the number of programs reporting from each state. Those states with the largest number of programs are those with the largest number of graduates, e.g., CA, NY, PA, TX. A total of 2,259 students from 65 programs completed their training in 2006. However, if we consider all programs that graduated P.A.'s in 2006 (i.e., 132 programs) we estimate that the total number of graduates would be approximately 4,831 (132 x 36.6).

Table 72. Number of 2006 Graduates by State

<u>State</u>	<u>Number Prog.</u>	<u>Number Grads</u>	<u>State</u>	<u>Number Prog.</u>	<u>Number Grads</u>	<u>State</u>	<u>Number Prog.</u>	<u>Number Grads</u>
AL	1	32	MA	3	89	OR	1	41
CA	4	229	MI	3	106	PA	7	261
CO	2	62	NH	1	21	SD	1	21
CT	1	30	NC	3	116	TN	1	31
GA	2	88	ND	1	23	TX	3	111
IA	2	59	NE	1	38	UT	1	34
ID	1	30	NJ	1	44	VA	3	90
IL	1	53	NM	2	35	WA	1	70
IN	2	57	NY	12	382	WI	1	30
LA	1	27	OH	2	49			
Total							65	2259

2006 Program Graduates: Employment Status by Consortia Region

The employment of recent graduates varied depending on the region where their program was located. Employment data are shown in Table 73. Programs located in the Southeastern region reported that 81.5% of their 2006 graduates had secured employment at the time the program reported. Programs in the Northeastern region had the lowest proportion of graduates employed (65%). The overall proportion of recent graduates who were unemployed, including the "Other" category, averaged 28.8% across the regions.

Table 73. Employment Characteristics of 2006 Graduates by Consortia Region

<u>Consortia Region</u>	<u>N</u>	<u>Employed</u>		<u>Unemployed</u>		<u>Other</u>		<u>Total Mean</u>
		<u>Mean</u>	<u>%</u>	<u>Mean</u>	<u>%</u>	<u>Mean</u>	<u>%</u>	
Northeastern	18	19.7	64.8%	0.5	1.6%	10.2	33.6%	30.4
Eastern	7	25.1	67.5%	0.4	1.1%	11.7	31.5%	37.3
Southeastern	10	29.1	81.5%	1.4	3.9%	5.2	14.6%	35.7
Midwestern	13	24.6	80.4%	0.2	0.7%	5.8	19.0%	30.6
Heartland	5	27.8	79.0%	2.4	6.8%	5.0	14.2%	35.2
Western	12	27.7	66.3%	2.5	6.0%	11.6	27.8%	41.8
Total	65	24.8	71.3%	1.1	3.2%	8.9	25.6%	34.8

Trends in Medical Specialty Selection of Recent Graduates, 1985 Through 2006

A comparison of the employment of recent graduates in primary and non-primary care medicine from 1985 through 2006 is shown in Table 74 (next page) and illustrated in Figure 22 (primary care includes F.M., G.I.M., Ob/Gyn, Peds) (page 60). From 1985 through 2006 there was an overall decrease in the proportion of graduates entering primary care practice, from 60% in 1985 to a low of 34% in 2003. In the past twenty-two years, an average of 51% of the graduates have selected primary care medical specialties.

Table 74. Employment of Recent Graduates in Primary and Non-Primary Care Medicine, 1985 Through 2006

Academic Year	Primary Care		Non-Primary Care		Total
	N	%	N	%	N
1985-1986	399	59.9%	278	41.1%	677
1986-1987	404	55.6%	322	44.4%	726
1987-1988	418	56.4%	323	43.6%	741
1988-1989	422	52.2%	387	47.8%	809
1989-1990	398	48.2%	427	51.8%	825
1990-1991	508	58.1%	367	41.9%	875
1991-1992	511	53.5%	444	46.5%	955
1992-1993	674	55.7%	537	44.3%	1211
1993-1994	826	58.0%	597	42.0%	1423
1994-1995	852	55.5%	684	44.5%	1536
1995-1996	817	52.2%	702	44.8%	1566
1996-1997	970	62.3%	588	37.7%	1558
1997-1998	1046	56.9%	792	43.1%	1838
1998-1999	1113	54.5%	928	45.5%	2041
1999-2000	1176	53.7%	1015	46.3%	2191
2000-2001	1143	53.9%	977	46.1%	2120
2001-2002	1014	46.5%	1166	53.5%	2180
2002-2003	964	49.0%	1003	51.0%	1967
2003-2004	623	33.7%	1228	66.3%	1851
2004-2005	837	38.3%	1346	61.7%	2183
2005-2006	660	35.2%	1214	64.8%	1874
<u>2006-2007</u>	<u>604</u>	<u>37.5%</u>	<u>1008</u>	<u>62.5%</u>	<u>1612</u>
22-Yr. Mean	745	51.3%	737	48.6%	1483

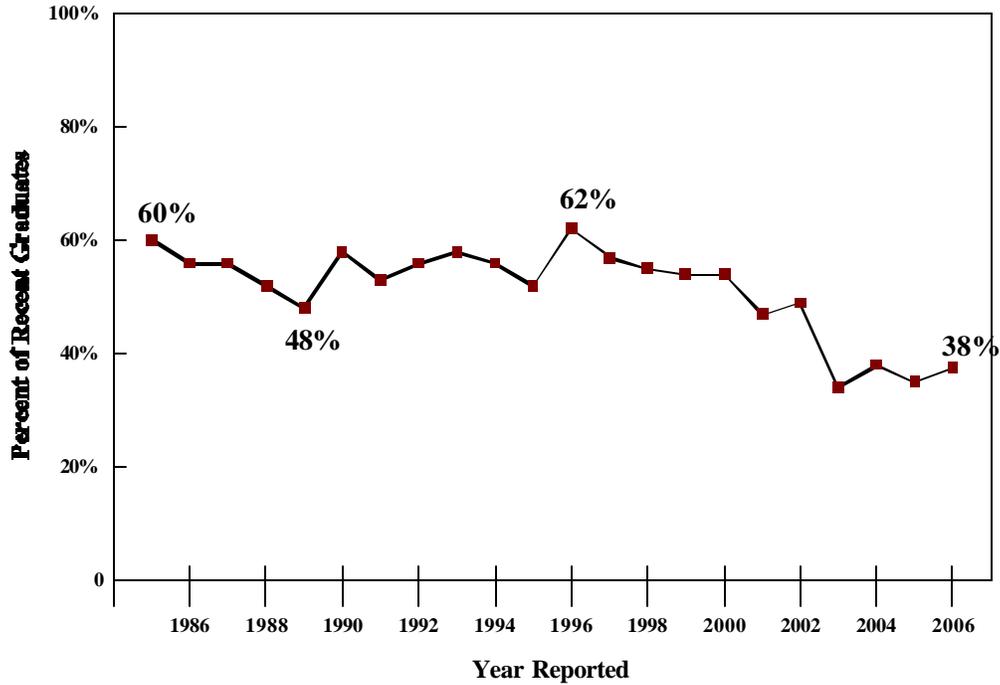
Employment of Recent Graduates in Primary and Non-Primary Care by Consortia Region

The relative proportion of 2006 graduates entering primary and non-primary care medical specialties by region is shown in Table 75. Graduates from programs in the Western region had the highest level of employment in primary care medical specialties (52%). Graduates from the Northeastern region had the highest level of employment in non-primary care specialties (73%).

Table 75. Employment of 2006 Graduates in Primary and Non-Primary Care Medicine, by Consortia Region

Consortia Region	N	Primary Care		Non-Primary Care	
		Mean	%	Mean	%
Northeastern	17	5.6	26.9%	15.2	73.1%
Eastern	7	7.4	29.5%	17.7	70.5%
Southeastern	10	11.1	38.1%	18.0	61.9%
Midwestern	13	9.3	37.8%	15.3	62.2%
Heartland	5	10.4	37.4%	17.4	62.6%
Western	<u>12</u>	<u>14.4</u>	<u>52.1%</u>	<u>13.3</u>	<u>47.9%</u>
Total	64	9.3	37.5%	15.5	62.5%

Figure 22. Recent Graduate Employment in Primary Care: 1985 Through 2006



The distribution of recent graduates selecting primary care medical specialties from 1993 through 2006 is shown in Table 76. Over the period analyzed, family medicine and general internal medicine remained the primary care specialties of choice. The ten-year average was 68% for family medicine and 20% for general internal medicine. The selection of both obstetrics and gynecology and pediatrics also varied over time, ranging from 3.0% to 8.0% and 5.3% to 9.2%, respectively.

Table 76. Trends in the Primary Care Medical Specialty Selection of Recent Graduates, 1995 Through 2006

	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>
Clinical	(68)	(74)	(77)	(76)	(82)	(73)	(75)	(88)	(80)	(64)
<u>Specialty</u>	<u>%</u>									
Fam Md	73.2	75.1	74.9	67.3	67.4	70.1	63.7	65.4	61.2	61.0
Int Med	17.7	16.3	14.8	21.5	17.0	16.4	20.5	22.5	26.8	25.0
Gen Ped	5.3	5.6	6.8	5.5	9.2	7.3	7.7	6.8	7.7	8.3
Ob/Gyn	3.8	3.0	3.4	5.7	6.4	6.2	8.0	5.7	4.3	5.7

* Number of Programs responding

Trends in the graduates' selection of non-primary care medicine over the past ten years shown in Table 77 (next page). Surgery (plus sub-specialties) and medicine sub-specialties accounted for almost three-fourths (72.8%) of the positions selected by recent graduates in non-primary care.

Table 77. Trends in the Non-Primary Care Medical Specialty Selection of Recent Graduates, 1995 Through 2006

	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>
Clinical	(68)	(74)	(77)	(76)	(82)	(73)	(75)	(88)	(80)	(64)
<u>Specialty</u>	<u>%</u>									
Surgery	35.1	36.2	31.4	40.4	38.6	41.2	46.6	48.5	47.8	44.5
Med	29.1	28.4	23.3	18.6	22.4	20.7	33.2	29.0	24.3	28.3
Em Med	32.3	33.3	37.7	36.5	32.6	29.4	17.5	19.2	25.2	24.7
Psych.	1.5	0.7	3.3	2.1	2.7	2.9	1.7	1.9	1.2	1.3
Ind Med	2.0	1.4	4.3	2.4	3.7	5.8	1.0	1.3	1.5	1.2

* Number of Programs responding

A list of the specific internal medicine subspecialties selected by 2006 graduates is shown in Table 78, along with the number of graduates and programs represented. A total of 237 recent graduates from fifty-four programs were employed among the subspecialties. The largest number of recent graduates selected cardiology (n=62; 31 programs).

Table 78. Internal Medicine Subspecialties Selected by 2006 Graduates

<u>Medical Area</u>	<u># of Graduates</u>	<u># of Programs</u>	<u>Medical Area</u>	<u># of Graduates</u>	<u># of Programs</u>
Cardiology	62	31	Neurology	17	10
Dermatology	43	31	Pulmonology	10	10
Oncology	38	24	AIDS/Inf. Diseases	7	7
Gastroenterology	28	20	Other	<u>32</u>	<u>26</u>
			Total	237	54

A list of surgical subspecialties selected by the recent graduates is in Table 79. A total of 318 recent graduates from sixty-one P.A. programs selected surgical sub-specialty areas as their first position. Proportionately, these graduates were employed most commonly in orthopedics (n=179; 56%).

Table 79. Surgical Subspecialties Selected by 2006 Graduates

<u>Surgical Area</u>	<u>Number of Graduates</u>	<u>Number of Programs</u>	<u>Surgical Area</u>	<u>Number of Graduates</u>	<u>Number of Programs</u>
Orthopedics	179	50	Plastic	18	18
CV/CT	40	23	Organ Transplant	4	4
Neurosurgery	45	27	Other Surg. Spec.	<u>32</u>	<u>21</u>
			Total	318	61

Medical Specialty Selection of Recent Graduates by Consortia Region

A comparison of medical specialty selection of recent graduates by consortia region is shown in Table 80 (next page). The data are presented as the mean number of recent graduates per program employed in each area. Medical specialties in which the largest proportion of recent graduates was employed is shown and include, family medicine, internal medicine (including subspecialties), and surgery (including subspecialties).

Table 80. Medical Specialties Selected by 2006 Graduates by Consortia Region

<u>Consortia Region</u>	<u>N</u>	<u>Family Medicine</u>		<u>Internal Medicine*</u>		<u>Surgery*</u>	
		<u>Mean</u>	<u>%</u>	<u>Mean</u>	<u>%</u>	<u>Mean</u>	<u>%</u>
Northeastern	14	2.0	13.2%	5.7	37.7%	7.4	49.0%
Eastern	7	3.0	15.9%	7.3	38.6%	8.6	45.5%
Southeastern	10	7.7	36.0%	18.0	37.4%	5.7	26.6%
Midwestern	13	6.5	41.1%	3.4	21.5%	5.9	37.3%
Heartland	5	6.4	29.7%	7.6	35.2%	7.6	35.2%
Western	<u>12</u>	<u>10.1</u>	<u>51.8%</u>	<u>5.1</u>	<u>26.2%</u>	<u>4.3</u>	<u>22.1%</u>
Total	61	5.8	32.2%	5.8	32.2%	6.4	35.6%

* Includes the sub-specialties

Please note the "other" category is not included in the table. Graduates from the Western region selected family medicine preferentially (52%) and those from the Northeastern region had the least percentage entering family medicine (13.2%). Conversely, graduates from programs in the Northeast selected surgery (49%) more frequently than did graduates from other regions.

Regional Variation and Trends in New Graduate Starting Salaries

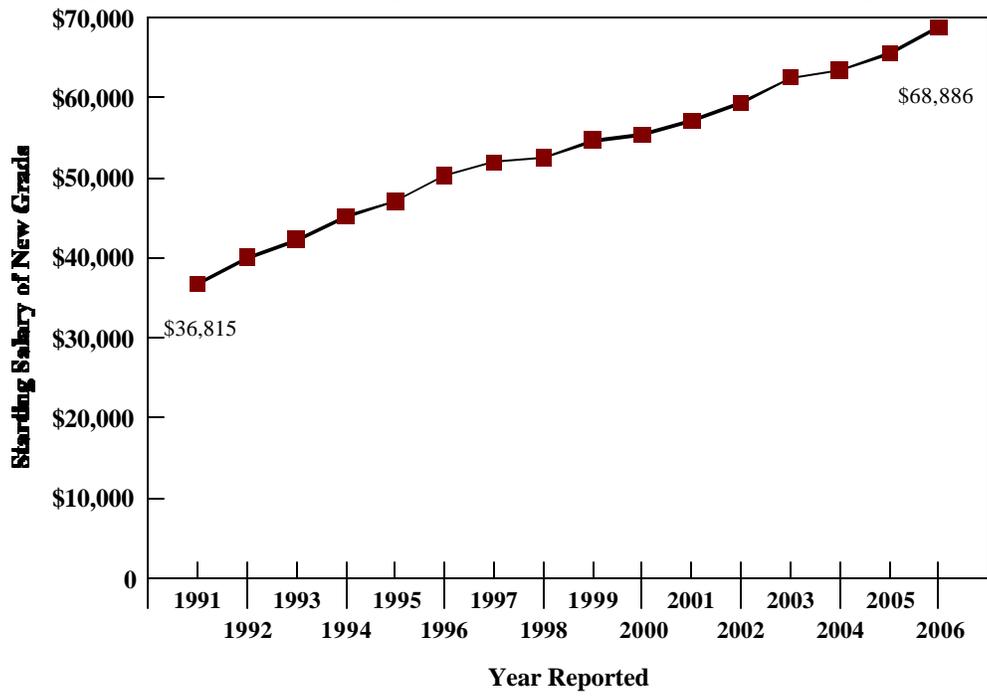
Table 81 shows the estimated starting salary of recent graduates in 2006 by region. The overall average was \$68,886, an increase of 5.0% from the 2005 average of \$65,595. Mean salaries were above \$65,000 for graduates from programs located in all but the Eastern region.

Table 81. Program Directors' Perceptions of Starting Salaries for P.A. Graduates by Consortia Region

<u>Consortia Region</u>	<u>N</u>	<u>Mean</u>	<u>Median</u>	<u>Change from 2005</u>
Northeastern	13	\$70,519	\$71,452	+ 5.9%
Eastern	5	\$63,633	\$64,000	+ 6.4%
Southeastern	8	\$70,638	\$72,700	+ 6.0%
Midwestern	10	\$66,620	\$66,000	+ 2.0%
Heartland	6	\$72,500	\$71,000	+ 6.5%
Western	<u>12</u>	<u>\$68,219</u>	<u>\$68,000</u>	<u>+ 3.4%</u>
Total	54	\$68,886	\$69,150	+ 5.0%

Salaries of graduates from programs located in the Heartland region marked the greatest increase from 2005 (6.5%). These data are also shown in Figure 23 (next page). Starting salaries have increased each year by an average of 4.3% and there has been an overall increase in salaries of 87.1% since 1991.

Figure 23. Trends in Starting Salary for New Graduates: 1991 Through 2006



SUMMARY AND CONCLUSIONS

This report presents an update of physician assistant educational programs in the United States for the 2006-2007 academic year. This is the twenty-third annual report to be published since 1984 and is based upon data drawn from the 2006 national survey of P.A. programs and includes APAP member programs and those enrolling students for the first time in 2006. Two surveys were administered. The surveys were mailed in January to 134 programs. The response rate for survey #1 was 81% (109 programs) and for survey #2 was 57%. Highlights of the findings are provided in this summary and includes a description of the "typical" P.A. program. Comparisons were also made across programs by consortia region.

As we have data extending from 1984, we were able to also examine trends which have occurred over the past twenty-three years for certain variables. Trends were analyzed relative to program budget and student expenses, personnel salaries and turnover, student and graduate characteristics, and salaries for recent graduates.

SECTION I. General Characteristics of P.A. Programs

The majority of programs (N=124; 92.5%) were associated with either a University or 4-year College. One hundred three programs (77%) awarded graduates a master's degree and twenty-one (16%) awarded graduates a baccalaureate degree; the remainder awarded either an associate degree or only a certificate of completion. The majority (N=85; 63.4%) of the current P.A. Programs were established since 1989; thirty-one percent of the programs were established in the period 1969 through 1976, an average of 5.25 programs/year. From 1977 through 1988 (12 years) only three new programs were developed. The "typical" P.A. curriculum was 26.8 months in length and ranged from 16 to 36 months. The majority of programs graduated their seniors over two periods, between May-June (N=41) and August-September (N=52).

P.A. programs received the majority of their financial support from the sponsoring institution, averaging \$795,539 (74% of the budget) and federal training grants, averaging \$134,907 (13% of the budget). Thirty programs (31%) reported they received federal training grant support in 2006-2007. The average cost per program to educate a P.A. student was estimated to be \$11,805/student/year, a figure derived by dividing the total budget by the total number of students enrolled. This value does not include other costs, for example, clinical preceptors and other educators whose wages are not included in the program's budget. Programs located in the Western region had the highest total budget (\$1,612,333 per program). Programs located in the Southeastern region had the highest level of federal training grant support (\$190,701 per program). Programs in the Midwestern region had the lowest total budget, averaging \$722,551 per program. Programs in the Midwestern region had the lowest level of federal training grant support (\$65,428).

The typical resident student paid an average of \$51,019 for tuition, books, fees, and equipment for their entire professional education in a P.A. program, the non-resident student paid \$58,671. Eighty-nine percent of the students received financial aid averaging \$24,454 per student per year. Students enrolled in programs located in the Northeastern region had the highest resident tuition (\$51,203/student/curriculum), while programs in the Heartland region had the lowest resident tuition (\$26,171/student/curriculum). Ninety-one percent of the students in programs located in the Western region received financial aid, while 86.5% of the students in the Heartland region received financial aid.

Trends from 1984 Through 2006

Total program budget increased an average of 6.6% annually from 1984 through 2006, a total increase of 289% over the past twenty-three years. During this period, institutional support for the typical program increased an average of 7.4% per year, while federal training grant support remained relatively unchanged and accounted for an average of 25% of the total program budget. Since 1984, both tuition and total student expenses have increased by over 480% while the proportion of students receiving financial assistance has increased to 89%. Since 1986, the amount of financial aid provided to students has increased by 590%, from \$3,866/student/year to \$26,685/student/year in 2006.

SECTION II. Program Personnel

In order to conduct an analysis of P.A. program personnel, the faculty and staff were divided into three major groups as follows: (1) program directors, (2) medical directors and (3) those faculty and staff associated with the educational and/or administrative aspects of the program (referred herein as program personnel). The latter group was subdivided on the basis of whether they were P.A.'s or non-P.A.'s and organized across four categories (I, II, III, IV) based on job titles and program responsibilities.

The typical P.A. program employed one medical (0.31) and one program director (0.984) and, on average, 4.4 P.A. credentialed and 1.3 non-P.A. faculty, and 2.5 Category IV personnel. Thus, the "core" personnel for the typical program amounted to approximately 10.2 FTE's including clerical and/or other types of support personnel. General characteristics were reported for directors and program faculty and staff, including, percent time working with the program, months in position, annual salary, highest degree held, academic classification and tenure track status, gender, and ethnicity. Annual salary was shown to vary by job category, consortia region, gender, ethnicity, academic classification, and highest degree held.

In comparison to the Category I - III personnel data gathered in 2005-2006, salaries for P.A. program personnel increased by 5.6%. Eighty-four percent of the Cat I - III personnel were classified as faculty. Twenty-four percent were on a tenure track and 22% of the tenure track faculty were tenured. Fifty-eight percent of the Category I - III program personnel had earned a masters degree and 12.3% held a doctorate as their highest degree.

On average, 58% of the P.A. credentialed staff and faculty (including program directors) provided 10 hours per week of clinical practice in addition to their educational activities. Eighty-four percent were paid for their clinical service which averaged \$42.56 per hour. Clinical earnings accounted for 20% of their salary.

In comparison to the 2005 data, the proportion of program directors who were credentialed as P.A.'s increased from 87% to 94%, salaries increased by 4.1% and months in position increased from 77 to 85 months. The majority of program (95.5%) and medical (90.5%) directors were classified as faculty and were on a tenure track. Less than one-fourth were tenured. Forty-one percent of the program directors had doctoral-level degrees (typically the Ph.D. or Ed.D.). Since 1984, there has been a 170% increase in mean salary for program directors and 54% increase for medical directors. The time in position for both medical and program directors has fluctuated extensively over the twenty-three year period.

Respondents also provided data on personnel turnover over the past year. For the period September 2005 through August 2006, turnover averaged 1.45 individual per program. Turnover across all programs was highest among Category I personnel (55/year) and lowest among the Medical Directors. Eight program director positions were filled during this period. Departing personnel had been in their positions an average of 54 months, those filling the position were in their previous position 54 months and were typically 4.8 years younger than their predecessors.

Vacated positions were filled within 11.2 weeks and were filled by individuals with similar academic and personal characteristics as those departing. The three primary reasons cited for the departure of personnel included, in descending order, career advancement, return to clinical practice and geographic relocation. In this past year, the salary of those filling the vacated position was 3.3% lower than the salary of the person leaving the position.

SECTION III. P.A. Student Characteristics

In 2006, the average size of the entering P.A. class was 43.5 students, 73% of whom were women. The senior class averaged 40.5 students per program with 6.8% of the maximum capacity of the class unfilled (due largely to attrition from the program). Using the mean values of the responding programs, the total enrollment (all classes) across all 99 programs was estimated to be 9,143. Similarly, the estimated first-year enrollment was 4,230 students with less than 1% enrolled as part-time students. The Heartland region had the largest number of students enrolled (50.3/program). Programs in the Midwestern region had the fewest number of students enrolled (33.6/program).

The typical entering student was described as a white/non-Hispanic female, 27 years of age, with a grade point average of 3.40 and 30.3 months of health care experience prior to admission.

The proportion of minority students enrolled in the first-year class has increased from 13.8% in 1983-84 to 23% in the current year. All but three programs reported that at least one minority student was enrolled in the 2006 class.

SECTION IV. Graduate Information

The average size of the 2006 graduating class was 36.6/program and was highest for programs located in the Heartland region (46.2/program) and lowest in the Midwestern region (30.8/program). The majority of recent graduates were female (72%) and non-minority (76%). The attrition rates across programs averaged 4.9% (2.0 students per program) and the reasons for withdrawal were most frequently due to academic (60.2%). The attrition rate reported in 2006 was lower than the previous year (6.0%). Attrition was highest among minorities and older students. Students from programs in the Eastern region had the highest attrition rate (8.2%) and those from programs in the Western region the lowest attrition (3.0%).

On average, 2.3 students per program were decelerated for a deceleration rate of 5.6%. These students were not considered "withdrawn" and therefore not included in the attrition figures. Deceleration occurred more frequently among minorities and older students. The highest deceleration rates were reported by programs located in the Heartland region (22.2%) and lowest for programs in the Western region (2.1%).

The proportion of 2006 graduates employed in primary care specialties increased from the previous year (37.5% versus 35% in 2004) and those so employed remained principally in family medicine or general internal medicine. The most common non-primary care specialties selected by recent graduates were surgery (including subspecialties) and emergency medicine. The most common medicine subspecialties was cardiology, while orthopedic surgery was the most common surgical specialties selected.

Based on responses from program directors, starting salaries continued to increase, averaging \$68,886, 6.5% above that reported for the 2005 academic year (\$65,595). Programs in the Southeastern region had the highest percent of employment (81.5%) while programs in the Northeastern had the lowest percent of employment of recent graduates.

REFERENCES

1. Physician Assistant Education Association, Physician Assistant Programs Directory. [Online]. Available <http://www.paeonline.org>, January, 2007.
2. Accreditation Review Commission on Education for the Physician Assistant, Inc., Accredited Programs [Online], Available http://www.arc-pa.org/Acc_Programs/acc_programs.html, January, 2007.
3. Oliver, D., J. Baker, and W. Donahue. First Annual Report on Physician Assistant Educational Programs in the United States, 1984-85. Association of Physician Assistant Programs, May, 1985.
4. Oliver, D., J. Baker, and W. Donahue. Second Annual Report on Physician Assistant Educational Programs in the United States, 1985-86. Association of Physician Assistant Programs, May, 1986.
5. Oliver, D., J. Baker, and W. Donahue. Third Annual Report on Physician Assistant Educational Programs in the United States, 1986-87. Association of Physician Assistant Programs, May, 1987.
6. Oliver, D., J. Baker, and W. Donahue. Fourth Annual Report on Physician Assistant Educational Programs in the United States, 1987-88. Association of Physician Assistant Programs, May, 1988.
7. Oliver, D., J. Baker, and W. Donahue. Fifth Annual Report on Physician Assistant Educational Programs in the United States, 1988-89. Association of Physician Assistant Programs, May, 1989.
8. Oliver, D., J. Baker, and W. Donahue. Sixth Annual Report on Physician Assistant Educational Programs in the United States, 1989-90. Association of Physician Assistant Programs, May, 1990.
9. Oliver, D., J. Baker, and W. Donahue. Seventh Annual Report on Physician Assistant Educational Programs in the United States, 1990-91. Association of Physician Assistant Programs, May, 1991.
10. Oliver, D., J. Baker, and W. Donahue. Eighth Annual Report on Physician Assistant Educational Programs in the United States, 1991-92. Association of Physician Assistant Programs, May, 1992.
11. Oliver, D., J. Baker, and W. Donahue. Ninth Annual Report on Physician Assistant Educational Programs in the United States, 1992-93. Association of Physician Assistant Programs, May, 1993.
12. Oliver, D., J. Baker, and W. Donahue. Tenth Annual Report on Physician Assistant Educational Programs in the United States, 1993-94. Association of Physician Assistant Programs, May, 1994.
13. Oliver, D., J. Baker, and W. Donahue. Eleventh Annual Report on Physician Assistant Educational Programs in the United States, 1994-95. Association of Physician Assistant Programs, May, 1995.
14. Simon, A., M. Link, and A. Miko. Twelfth Annual Report on Physician Assistant Educational Programs in the United States, 1995-96. Association of Physician Assistant Programs, May, 1996.
15. Simon, A., M. Link, and A. Miko. Thirteenth Annual Report on Physician Assistant Educational Programs in the United States, 1996-97. Association of Physician Assistant Programs, May, 1997.
16. Simon, A., M. Link, and A. Miko. Fourteenth Annual Report on Physician Assistant Educational Programs in the United States, 1997-98. Association of Physician Assistant Programs, May, 1998.
17. Simon, A., M. Link, and A. Miko. Fifteenth Annual Report on Physician Assistant Educational Programs in the United States, 1998-99. Association of Physician Assistant Programs, May, 1999.
18. Simon, A., M. Link, and A. Miko. Sixteenth Annual Report on Physician Assistant Educational Programs in the United States, 1999-2000. Association of Physician Assistant Programs, July, 2000.

19. Simon, A., M. Link, and A. Miko. Seventeenth Annual Report on Physician Assistant Educational Programs in the United States, 2000-2001. Association of Physician Assistant Programs, August, 2001.
20. Simon, A., M. Link, and A. Miko. Eighteenth Annual Report on Physician Assistant Educational Programs in the United States, 2001-2002. Association of Physician Assistant Programs, September, 2002.
21. Simon, A., M. Link, and A. Miko. Nineteenth Annual Report on Physician Assistant Educational Programs in the United States, 2002-2003. Association of Physician Assistant Programs, August, 2003.
22. Simon, A. and M. Link. Twentieth Annual Report on Physician Assistant Educational Programs in the United States, 2003-2004. Association of Physician Assistant Programs, August, 2004.
23. Simon, A. and M. Link. Twenty-First Annual Report on Physician Assistant Educational Programs in the United States, 2004-2005. Physician Assistant Education Association, November, 2005.
24. Simon, A. and M. Link. Twenty-Second Annual Report on Physician Assistant Educational Programs in the United States, 2005-2006. Physician Assistant Education Association, November, 2006.
25. Link, M. Twenty-Third Annual Report on Physician Assistant Educational Programs in the United States, 2006-2007. Physician Assistant Education Association, January, 2008.