



PAEA RESEARCH

**Curriculum
Report 5** | **Didactic**

By the Numbers | Data from the 2019 Didactic Curriculum Survey

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The PAEA Research Team staff was responsible for the development and administration of the survey as well as for the preparation of this report. For any questions regarding the contents of this report, please contact research@PAEAonline.org.

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BY THE NUMBERS

CURRICULUM REPORT 5: DATA FROM THE 2019 DIDACTIC CURRICULUM SURVEY

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INTRODUCTION

PHYSICIAN ASSISTANT EDUCATION ASSOCIATION

Founded in 1972, the Physician Assistant Education Association (PAEA) represents all accredited physician assistant (PA) education programs in the United States. At the time of the 2019 Didactic Curriculum Survey administration in July 2019, PAEA represented 242 PA programs. For more information about PAEA and our products and services, visit [PAEAonline.org](https://www.paeaonline.org).

IMPORTANT NOTICE

These data were collected in 2019, prior to the onset of the COVID-19 (coronavirus) pandemic in 2020. It is unknown to what extent results are still reflective of PA programs as the pandemic forced PA education to rapidly adapt on a situational basis. For more information about the changes that PA programs made to continue providing excellent education amidst an ever-evolving crisis, PAEA members are encouraged to read our limited series of [COVID-19 Rapid Response Reports](#).

METHODS

SURVEY INSTRUMENT

The 2019 Curriculum Survey collected data on PA programs' didactic curricula, which are reported in the following sections:

Section 1. Program Information: Satellite campuses, distance learning, requirements students must meet to participate in supervised clinical practice rotations, and learning management systems

Sections 2 through 6: Course structure, required contact hours, methods of instruction, and methods of assessment for the following categories of didactic curriculum:

- **Section 2. Basic Medical Sciences**
- **Section 3. Clinical Preparatory Sciences**
- **Section 4. Behavioral & Social Sciences**
- **Section 5. Health Policy & Professional Practice**
- **Section 6. Research**

Section 7. Certifications

Section 8. Interprofessional Education: Types of health professional students that PA students interact with, and the classroom/laboratory and extracurricular settings in which interprofessional education occurs during the didactic phase

The data in all sections of the survey reflect the 2018–2019 academic year.

SURVEY ADMINISTRATION

The Curriculum Survey is administered in three parts that rotate annually and that correspond to the major phases of PA school: the prerequisites/admissions phase, the didactic phase, and the clinical phase. Thus far, the Prerequisite Curriculum Survey has been administered in 2015 and 2018, the Didactic Curriculum Survey administered in 2016 and 2019, and the Clinical Curriculum Survey administered in 2017. Reports on each of the survey results are released the year following administration.

The 2019 Didactic Curriculum Survey was sent to the program directors of PAEA's 242 member programs in July 2019. The PAEA Research Team sent email reminders to non-respondents and conducted follow-up calls until the survey closed in December 2019. The survey yielded an overall response rate of 98.8% based on the 239 respondents; however, the response rate varies for individual items.

DATA CLEANING AND ANALYSIS

Responses to multiple-choice questions were checked for logical consistency and examined for extreme values and possible errors. In cases of obvious misinterpretations or inconsistencies in the responses to specific items, respondents were contacted for clarification. Responses that fell outside of reasonable parameters were not included in the analyses. The number of responses to individual survey items varied slightly. The tables and figures presented in this report display aggregate data from the respondents. Programs had the option of reporting on other courses not included in the survey instrument. Due to low frequencies of repeat responses across programs and therefore the limited utility of those data, results for these “other” courses were not included in the present report.

In general, analyses of the data consisted of calculating descriptive statistics on the variables of interest — percentage, minimum and maximum values; arithmetic mean (*M*); standard deviation (*SD*); median (*Mdn*); and 10th, 25th, 50th, 75th, and 90th percentiles (P10, P25, P50, P75, P90). For some tables and figures, percentages will not equal 100% due to rounding or when multiple responses were allowed. Total columns on tables and figures are designated by *n* for the number of programs reporting. Any other notations not described here are defined in the body of the report.

LIMITATIONS

As previously noted, impacts of the COVID-19 pandemic may significantly limit the generalizability of this report.

For the first time since 2015, when the Curriculum Survey was split into its current three-part rotation, this survey did not achieve a 100% response rate; therefore, this report does not contain complete coverage of all PAEA member programs at the time of survey administration. Still, the high response rate of 98.8% does ensure that results presented here are broadly representative of the entire landscape of PA programs in the United States. Upon realizing that a 100% response rate was not going to be possible this year, the PAEA Research Team investigated whether non-responding and responding programs differed based on certain program characteristics, such as institution type and Academic Health Center status. Fortunately, no clear patterns were identified, but this analysis revealed inconsistencies in reported program characteristics over the years.

As with any survey, all data presented in this and prior reports are self-reported by programs and may vary in response rate and accuracy; thus, yearly fluctuations in the data do occur. If substantial changes in any data occur in a particular year, PAEA recommends waiting until the following year's report is released before taking any permanent actions in your program, in order to identify whether the change was unique to that year (e.g., due to response rate or random fluctuation).

Finally, programs were provided with lists of course names and topic areas and asked to report about the portions of their curricula that matched most closely. It is unknown to what extent they are exact matches, and it is possible there may be overlap between subject areas (e.g., “behavioral medicine” and “substance use disorder”) or subject areas that were not captured.

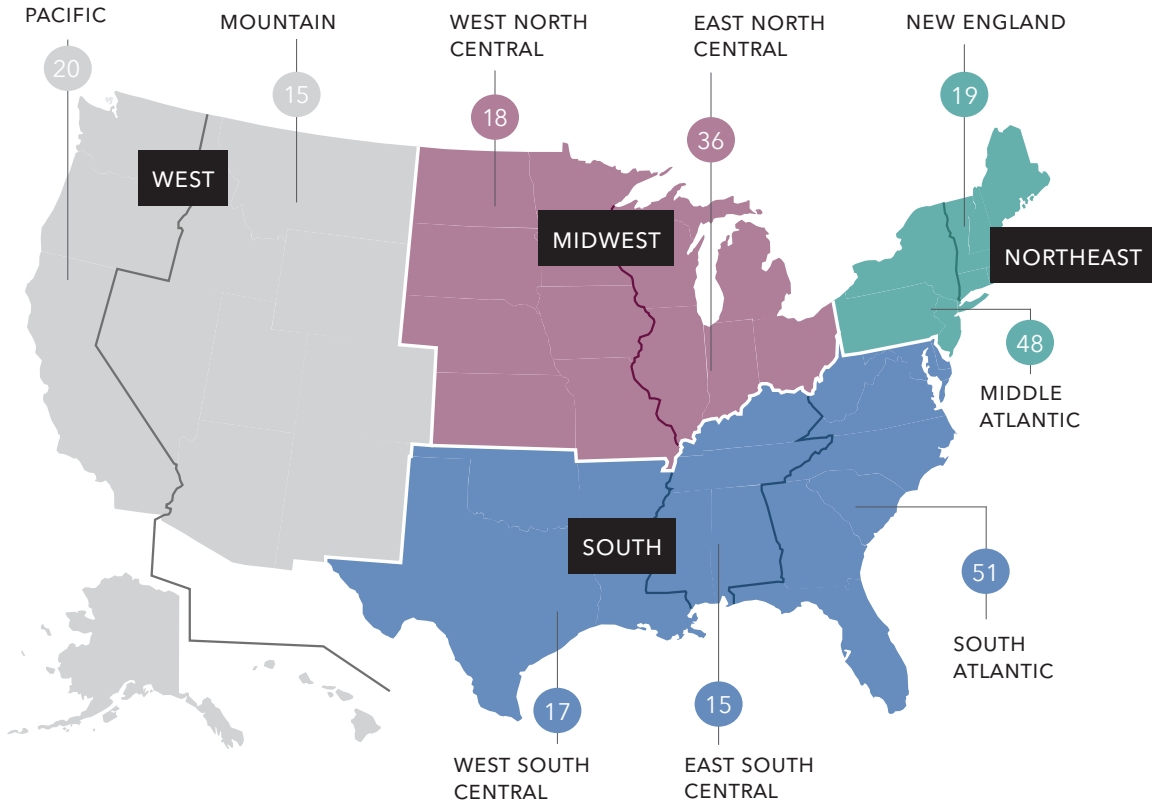
QUESTIONS AND DATA REQUESTS

The data from the 2019 Curriculum Survey, as well as custom reports using these data, are available upon request. More information is available in PAEA's [Data Request and Sharing Policies](#). Please direct inquiries regarding data requests or this report to the Research Team at research@PAEAonline.org.

SECTION 1. PROGRAM INFORMATION

Data presented in this section were also published in October 2020 in *By the Numbers: Program Report 35: Data from the 2019 Program Survey*. For more information about program characteristics, please see our [By the Numbers: Program Report](#) series.

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



REGION 1 NORTHEAST 67 PROGRAMS

DIVISION 1 NEW ENGLAND

Connecticut (6)
Maine (1)
Massachusetts (8)
New Hampshire (2)
Rhode Island (2)
Vermont (0)

DIVISION 2 MIDDLE ATLANTIC

New Jersey (3)
New York (23)
Pennsylvania (22)

REGION 2 MIDWEST 54 PROGRAMS

DIVISION 3 EAST NORTH CENTRAL

Illinois (5)
Indiana (8)
Michigan (6)
Ohio (12)
Wisconsin (5)

DIVISION 4 WEST NORTH CENTRAL

Iowa (3)
Kansas (1)
Minnesota (4)
Missouri (4)
Nebraska (4)
North Dakota (1)
South Dakota (1)

REGION 3 SOUTH 83 PROGRAMS

DIVISION 5 SOUTH ATLANTIC

Delaware (0)
District of Columbia (1)
Florida (16)
Georgia (5)
Maryland (3)
North Carolina (10)
South Carolina (5)
Virginia (8)
West Virginia (3)

DIVISION 6 EAST SOUTH CENTRAL

Alabama (3)
Kentucky (3)
Mississippi (1)
Tennessee (8)

DIVISION 7 WEST SOUTH CENTRAL

Arkansas (2)
Louisiana (3)
Oklahoma (3)
Texas (9)

REGION 4 WEST 35 PROGRAMS

DIVISION 8 MOUNTAIN

Arizona (3)
Colorado (4)
Idaho (1)
Montana (1)
Nevada (2)
New Mexico (2)
Utah (2)
Wyoming (0)

DIVISION 9 PACIFIC

Alaska (0)
California (16)
Hawaii (0)
Oregon (2)
Washington (2)

Note: Numbers in parentheses indicate the number of PAEA member programs in each state.

TABLE 1. SPONSORING INSTITUTION ATTRIBUTES

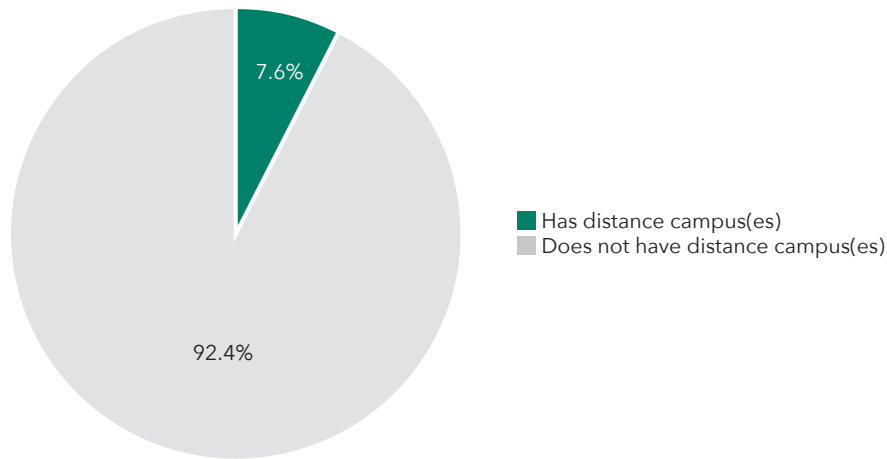
	<i>n</i>	%
Type of institution		
Private, non-profit	148	61.9
Public	70	29.3
Private, for-profit	13	5.4
Public/private hybrid	7	2.9
Military	1	0.4
Academic Health Center status		
Not AHC	174	72.8
AHC	65	27.2
Administrative housing		
School of Allied Health/Health Professions/Health Sciences	119	49.8
Department of PA Studies/PA Program	42	17.6
College/School of Medicine	37	15.5
College of Graduate and Professional Studies	11	4.6
College of Arts and Sciences	5	2.1
Science department	4	1.7
Other health discipline (e.g., Nursing, Pharmacy, Podiatry)	2	0.8
Other administrative housing	19	7.9
Total	239	100.0

TABLE 2. GEOGRAPHIC DISTRIBUTION OF PA PROGRAMS

	<i>n</i>	%
Northeast Region		
New England Division	19	7.9
Middle Atlantic Division	48	20.1
Subtotal	67	28.0
Midwest Region		
East North Central Division	36	15.1
West North Central Division	18	7.5
Subtotal	54	22.6
South Region		
South Atlantic Division	51	21.3
East South Central Division	15	6.3
West South Central Division	17	7.1
Subtotal	83	34.7
West Region		
Mountain Division	15	6.3
Pacific Division	20	8.4
Subtotal	35	14.6
Total	239	100.0

DISTANCE LEARNING

FIGURE 2. DISTANCE CAMPUSES



Note: $n = 236$

On average, among the 16 programs with satellite campuses that reported their student enrollment at both their primary and distance campuses, 37.4% of the program's students were enrolled in a satellite campus (min = 18.4%, max = 66.7%, SD = 15.1%, Mdn = 31.9%).

TABLE 3. NUMBER OF STUDENTS ENROLLED AT DISTANCE CAMPUSES

	n (P)	n (S)	Min	Max	M	SD	Mdn
Students enrolled at primary campus	16	560	9	85	35.0	21.6	34.0
Students enrolled at distance campus(es)	16	865	24	122	54.1	23.2	50.5
Total enrollment	16	1,425	48	172	89.1	35.4	80.0

Note: Only programs that indicated they had at least one distance campus were asked to respond to this question. n (S) refers to the number of enrolled students reported by the n (P) responding programs. Zeroes were excluded from analysis.

TABLE 4. DELIVERY OF CURRICULUM TO DISTANCE CAMPUSES (%)

	n	Never	Rarely	Sometimes	Frequently	Always
Faculty assigned to primary campus	17	0.0	5.9	0.0	47.1	47.1
Faculty assigned to distance campus(es)	17	0.0	5.9	23.5	29.4	41.2
Primary and distance campus curricula are independent	16	75.0	18.8	0.0	0.0	6.3
Virtual Classroom Training (VCT)	16	37.5	6.3	12.5	31.3	12.5

Note: Only programs that indicated they had at least one distance campus were asked to report the frequency with which they deliver didactic curriculum to students at distance campuses via these methods of instruction.

TABLE 5. PERCENTAGE (%) OF DIDACTIC CONTENT ORIGINATING FROM EACH CAMPUS OR SOURCE

	<i>n</i>	<i>Min</i>	<i>Max</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>
Primary campus to satellite	16	1.0	99.0	52.2	25.9	55.0
Satellite to primary campus	16	1.0	62.0	27.9	18.6	27.5
Primary campus self-contained	8	5.0	98.0	33.1	32.2	22.5
Satellite campus self-contained	8	5.0	98.0	33.1	32.2	22.5
Students access curriculum from a third-party source	3	5.0	15.0	8.3	5.8	5.0

Note: Only programs that indicated they had at least one distance campus were asked to report the approximate percentage of their didactic content that originated from each campus or source on an annual basis. Percentages were required to sum to 100%. Zeroes were excluded from analysis.

CONTENT DELIVERY

TABLE 6. PRIMARY MODE OF INSTRUCTION

	<i>n</i>	<i>%</i>
Lecture/laboratory	95	40.3
Patient-based (PBL)/Case-based/Team-based (TBL) learning	9	3.8
Combination of these modes	131	55.5
Total	235	99.6

TABLE 7. PRIMARY CURRICULUM DELIVERY METHOD

	<i>n</i>	<i>%</i>
On-site	224	94.9
Distance, synchronous	8	3.4
Distance, asynchronous	1	0.4
Other methods	3	1.3
Total	236	100.0

TABLE 8. LEARNING MANAGEMENT SYSTEM(S) USED BY PROGRAM

	<i>n</i>	<i>%</i>
BlackBoard™	88	37.3
Canvas™	79	33.5
Moodle™	27	11.4
D2L™	21	8.9
Sakai™	6	2.5
Other		
eMedley™	4	1.7
Exxat™	4	1.7
All other learning management systems	16	6.8
None	3	1.3
Total	236	-

Note: Percentages may sum to more than 100% because programs could select multiple learning management systems. The learning management systems listed under "Other" were categorized based on programs' write-in descriptions.

TABLE 9. PRIMARY METHOD FOR TESTING WITHIN CURRICULUM

	<i>n</i>	%
Computer-based, locally (program) developed (e.g., ExamSoft™, Blackboard™)	182	76.2
Computer-based, commercially developed (e.g., Exam Master™)	25	10.5
Scantron™ or similar scannable device	12	5.0
Paper-based	2	0.8
Both computer-based, locally developed and Scantron™	15	6.3
Other methods	3	1.3
Total	239	100.0

REQUIREMENTS FOR ADVANCEMENT WITHIN AND BEYOND DIDACTIC PHASE

194 programs (82.9%) reported that students had to achieve a minimum average GPA across all didactic courses to be considered for promotion/advancement to the next semester of the didactic phase. Of these programs, 192 programs reported an average required minimum GPA of 2.90 (min = 2.00, max = 3.15, *SD* = 0.24, *Mdn* = 3.00).

TABLE 10. ACADEMIC PERFORMANCE REQUIREMENTS TO PROCEED TO CLINICAL PHASE OF PROGRAM

	<i>n</i>	%
Minimum GPA achieved for entire didactic curriculum	163	72.1
Successful passing grades in each didactic course (i.e., a pass/fail grading system)	130	57.5
Pass OSCEs	105	46.5
Pass pre-clinical summative examination	77	34.1
Minimum average percentage/letter grade achieved for entire didactic curriculum	67	29.6
Minimum GPA or percentage/letter grade achieved for some, but not all courses	16	7.1
Other requirements	11	4.9
Total	226	-

226 programs (94.5%) required students to meet academic requirements to proceed to the clinical phase of the program. Among the 165 programs that reported their required minimum average GPA, the average requirement was 2.2 (min = 2.00, max = 3.15, SD = 0.19, Mdn = 3.00).

Note: Percentages may sum to more than 100% because programs could select multiple requirements.

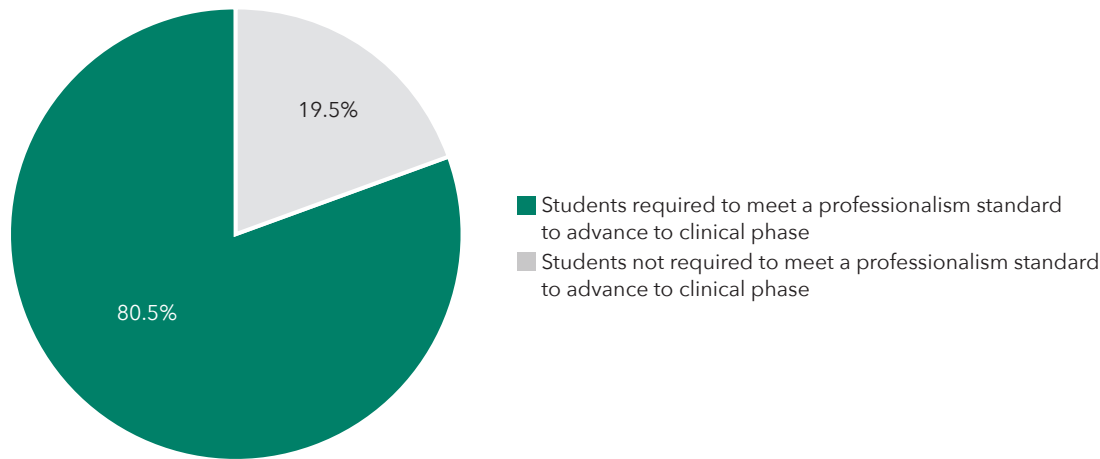
TABLE 11. MINIMUM LETTER GRADE FOR ENTIRE DIDACTIC CURRICULUM REQUIRED TO PROCEED TO CLINICAL PHASE OF PROGRAM

	<i>n</i>	%
B	21	35.6
B-	13	22.0
C+	4	6.8
C	12	20.3
C-	9	15.3
Total	59	100.0

Note: Only programs that indicated that students were required to achieve a minimum average percentage or letter grade to proceed to the clinical phase of the program were asked to respond to this question.

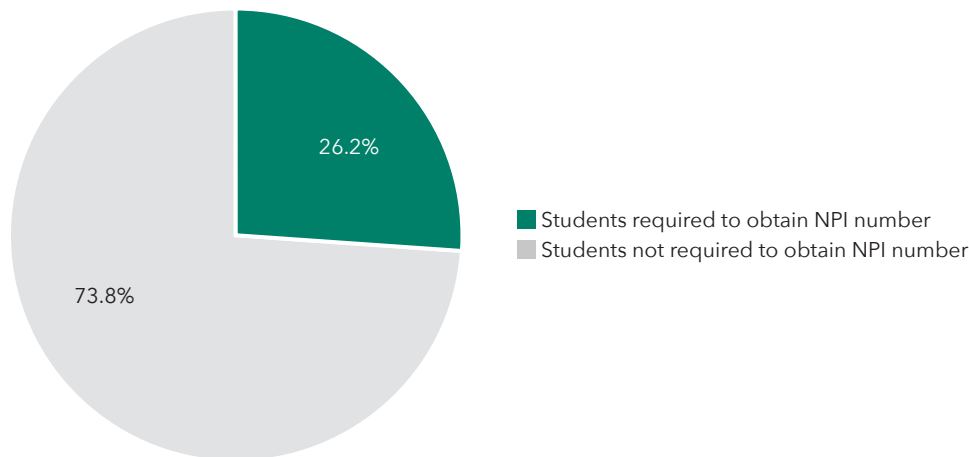
Programs were to report the required “minimum average percentage/letter grade” achieved for the entire didactic curriculum that students needed to meet to proceed to the clinical phase. Responding programs provided a mix of letter grades, percentages, and GPAs. All responses were converted to letter grades using [The College Board’s standards](#).

FIGURE 3. PROFESSIONALISM STANDARD



Note: *n* = 236

FIGURE 4. NPI NUMBER REQUIREMENT



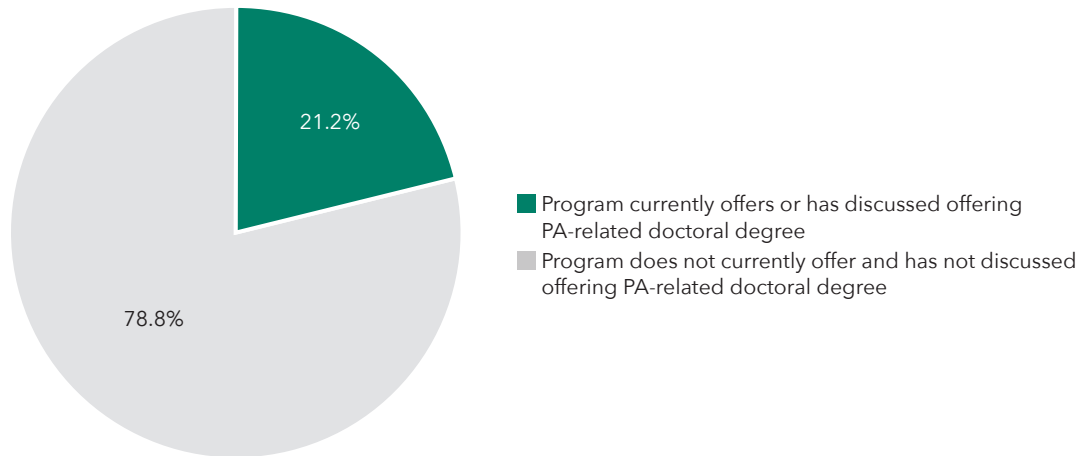
Note: *n* = 237

Programs were asked whether they currently required students to obtain a National Provider Identifier (NPI) number at any point during the program.

DOCTORAL DEGREE CONSIDERATION

The discussion about offering PA-related doctoral degrees as an entry-level or optional choice has grown in recent years. These data were collected in the summer of 2019, prior to motions advanced by PAEA member programs at Education Forum business meetings to investigate the feasibility of an entry-level PA doctorate.

FIGURE 5. DOCTORAL DEGREE CONSIDERATION



Note: n = 236

TABLE 12. STATUS OF PA-RELATED DOCTORAL DEGREE CONSIDERATIONS

	n	%
Program <u>currently offers</u> a PA-related <u>post-graduate</u> doctoral degree	4	8.0
Program <u>currently offers</u> a PA-related <u>entry-level</u> doctoral degree	0	0.0
Program has <u>firm plans</u> to offer a PA-related <u>post-graduate</u> doctoral degree	3	6.0
Program has <u>firm plans</u> to offer a PA-related <u>entry-level</u> doctoral degree	1	2.0
Program has <u>discussed offering</u> a PA-related <u>post-graduate</u> doctoral degree but currently has no firm plans	34	68.0
Program has <u>discussed offering</u> a PA-related <u>entry-level</u> doctoral degree but currently has no firm plans	8	16.0
Total	50	100.0

Note: Only programs that indicated that they had either discussed offering or currently offer a PA-related doctoral degree were asked to respond to this question.

SECTION 2. BASIC MEDICAL SCIENCES

Programs were asked to report on the following basic medical science courses:

- Anatomy
- Biochemistry*
- Genetics
- Immunology*
- Medical terminology
- Microbiology
- Molecular basis of disease
- Pathophysiology
- Pharmacology
- Physiology*

Programs could also report about “other” basic medical science courses. Examples of these courses include embryology, neuroanatomy, and nutrition. Due to low frequencies, these results were not included in the current report. Courses in the list above marked with an asterisk (*) were added to the 2019 survey based on the most frequently listed “other” basic medical science courses reported by programs in the 2016 survey.

TABLE 13. BASIC MEDICAL SCIENCES: COURSE STRUCTURE (%)

	<i>n</i>	Stand-alone/ Distinct	Integrated into several courses	Module in one course	Do not offer
Anatomy	236	86.0	12.7	1.3	0.0
Biochemistry	233	5.2	43.8	2.6	48.5
Genetics	235	21.3	59.1	16.2	3.4
Immunology	236	5.5	70.3	16.9	7.2
Medical terminology	236	9.3	35.6	6.8	48.3
Microbiology	235	17.4	64.3	6.4	11.9
Molecular basis of disease	234	3.0	75.2	5.1	16.7
Pathophysiology	236	48.7	49.2	1.3	0.8
Pharmacology	236	86.9	13.1	0.0	0.0
Physiology	235	56.6	40.4	1.7	1.3

TABLE 14. BASIC MEDICAL SCIENCES: REQUIRED CONTACT HOURS

	<i>n</i>	Min	Max	<i>M</i>	<i>SD</i>	P10	P25	P50 (<i>Mdn</i>)	P75	P90
Anatomy										
Lecture	232	2.0	193.0	52.9	25.7	28.2	38.8	45.0	60.0	86.7
Lab	220	1.0	180.0	52.3	33.0	15.0	30.0	45.0	67.5	90.6
Biochemistry										
Lecture	109	1.0	100.0	17.0	17.1	2.8	5.0	10.0	20.0	45.0
Lab	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Genetics										
Lecture	215	1.0	216.0	15.0	18.5	4.0	6.5	10.0	16.0	30.0
Lab	5	1.5	30.0	10.1	11.4	2.5	4.0	7.0	8.0	21.2
Immunology										
Lecture	202	1.0	216.0	12.0	17.9	4.0	5.0	10.0	13.0	20.0
Lab	3	2.0	6.0	3.7	2.1	2.2	2.5	3.0	4.5	5.4
Medical terminology										
Lecture	94	1.0	135.0	12.9	20.7	1.0	2.0	6.0	14.8	28.5
Lab	4	10.0	50.0	27.2	18.4	11.5	13.8	24.5	38.0	45.2
Microbiology										
Lecture	193	1.0	216.0	20.9	21.6	4.0	9.5	15.0	30.0	45.0
Lab	15	2.0	45.0	12.5	14.3	2.0	3.5	6.0	15.0	35.0
Molecular basis of disease										
Lecture	172	1.0	288.0	22.2	32.4	4.0	7.4	12.0	25.0	45.0
Lab	5	2.0	20.0	12.8	6.7	6.0	12.0	15.0	15.0	18.0
Pathophysiology										
Lecture	220	2.0	403.0	69.0	65.2	20.0	37.5	47.5	78.5	135.0
Lab	7	4.0	67.5	23.9	22.7	4.0	10.0	16.0	30.0	51.0
Pharmacology										
Lecture	228	2.0	368.0	93.1	42.7	45.0	70.0	90.0	110.0	136.5
Lab	11	2.0	48.0	12.2	14.8	2.0	3.0	6.0	15.0	30.0
Physiology										
Lecture	220	2.0	288.0	50.8	32.1	20.0	30.0	45.0	60.0	83.1
Lab	21	2.0	67.5	18.4	16.7	6.0	7.0	15.0	20.0	45.0

Note: Only programs that reported a minimum number of required contact hours are reported here. If a program left the question blank or entered "0," they were excluded from this table. In addition, based on previous years' data, reports of over 450 minimum required hours for any particular course were excluded as extreme outliers. "NR" indicates that no valid responses were received.

FIGURE 6. BASIC MEDICAL SCIENCES: AVERAGE REQUIRED CONTACT HOURS

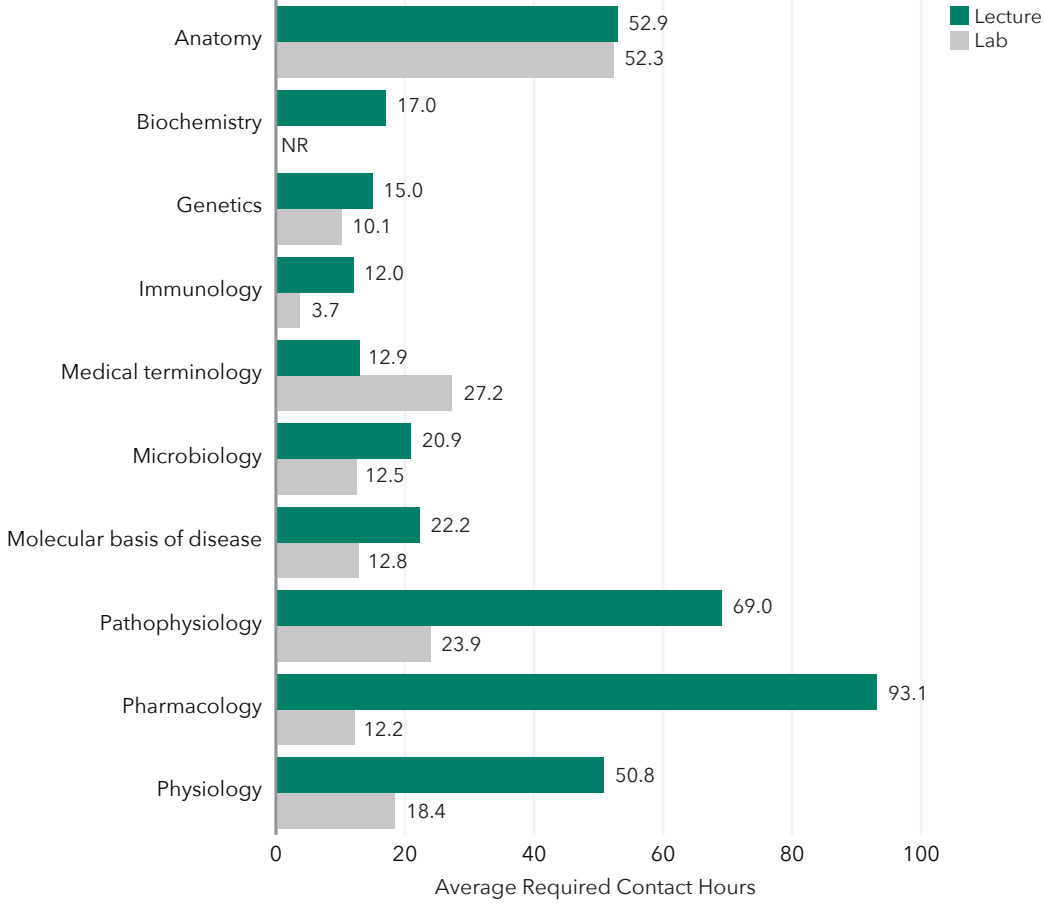


TABLE 15. BASIC MEDICAL SCIENCES: MODES OF INSTRUCTION (%)

	<i>n</i>	Lecture only	Lab only	Lecture/lab combination	Seminar	Self-instructional	Case-based/TBL/PBL
Anatomy							
Primary mode	235	7.7	0.9	90.6	0.4	0.0	0.4
Secondary mode	76	7.9	18.4	13.2	1.3	23.7	35.5
Biochemistry							
Primary mode	115	89.6	0.0	4.3	0.0	0.9	5.2
Secondary mode	35	42.9	2.9	0.0	2.9	20.0	31.4
Genetics							
Primary mode	221	86.9	0.5	2.7	1.4	5.0	3.6
Secondary mode	76	36.8	1.3	1.3	5.3	22.4	32.9
Immunology							
Primary mode	213	91.1	0.5	2.8	0.0	0.9	4.7
Secondary mode	55	38.2	0.0	1.8	1.8	20.0	38.2
Medical terminology							
Primary mode	119	43.7	0.0	5.0	0.0	48.7	2.5
Secondary mode	35	20.0	5.7	2.9	2.9	45.7	22.9
Microbiology							
Primary mode	201	84.6	0.5	11.4	0.0	0.5	3.0
Secondary mode	56	32.1	1.8	1.8	1.8	19.6	42.9
Molecular basis of disease							
Primary mode	190	91.6	0.5	4.2	0.0	0.5	3.2
Secondary mode	59	39.0	0.0	3.4	1.7	16.9	39.0
Pathophysiology							
Primary mode	230	88.7	0.4	5.2	0.0	0.0	5.7
Secondary mode	82	29.3	3.7	2.4	0.0	15.9	48.8
Pharmacology							
Primary mode	219	93.6	0.4	3.4	0.4	0.9	1.3
Secondary mode	86	25.6	4.7	1.2	1.2	14.0	53.5
Physiology							
Primary mode	230	85.7	0.9	9.1	0.4	0.9	3.0
Secondary mode	70	34.3	1.4	7.1	0.0	17.1	40.0

TABLE 16. BASIC MEDICAL SCIENCES: MODES OF ASSESSMENT (%)

	<i>n</i>	Multiple-choice	Practical exams	OSCEs	Writing assignment	Oral presentation	Portfolio
Anatomy							
Primary mode	235	84.3	14.9	0.0	0.9	0.0	0.0
Secondary mode	185	17.8	77.8	1.6	2.2	0.5	0.0
Biochemistry							
Primary mode	116	96.6	0.9	0.0	2.6	0.0	0.0
Secondary mode	23	60.9	8.7	13.0	13.0	4.3	0.0
Genetics							
Primary mode	221	96.8	0.5	0.0	2.3	0.5	0.0
Secondary mode	60	43.3	5.0	6.7	31.7	11.7	1.7
Immunology							
Primary mode	212	99.1	0.5	0.0	0.5	0.0	0.0
Secondary mode	43	58.1	4.7	9.3	23.3	4.7	0.0
Medical terminology							
Primary mode	119	89.1	3.4	0.0	6.7	0.8	0.0
Secondary mode	33	45.5	12.1	12.1	27.3	0.0	3.0
Microbiology							
Primary mode	200	99.0	0.5	0.0	0.5	0.0	0.0
Secondary mode	40	55.0	7.5	12.5	17.5	5.0	2.5
Molecular basis of disease							
Primary mode	189	98.9	0.5	0.5	0.0	0.0	0.0
Secondary mode	43	51.2	14.0	9.3	16.3	7.0	2.3
Pathophysiology							
Primary mode	231	99.6	0.4	0.0	0.0	0.0	0.0
Secondary mode	70	41.4	10.0	18.6	17.1	11.4	1.4
Pharmacology							
Primary mode	234	98.3	0.4	0.9	0.4	0.0	0.0
Secondary mode	74	28.4	6.8	28.4	23.0	10.8	2.7
Physiology							
Primary mode	229	99.1	0.9	0.0	0.0	0.0	0.0
Secondary mode	57	42.1	10.5	17.5	15.8	12.3	1.8

SECTION 3. CLINICAL PREPARATORY SCIENCES

Programs were asked to report on the following clinical preparatory science courses:

- Clinical decision-making*
- Clinical medicine
- Electrocardiology*
- History/Interviewing skills
- Laboratory medicine/Imaging/Diagnostics
- Physical assessment/Examination skills
- Point-of-care ultrasound (POCUS)
- Technical skills/Procedures

Programs could also report about “other” clinical preparatory science courses. Examples of these courses include clinical integration, emergency medicine, and medical documentation. Due to low frequencies, these results were not included in the current report. Courses in the list above marked with an asterisk (*) were added to the 2019 survey based on the most frequently listed “other” clinical preparatory science courses reported by programs in the 2016 survey.

TABLE 17. CLINICAL PREPARATORY CLASSES: COURSE STRUCTURE (%)

	<i>n</i>	Stand-alone/ Distinct	Integrated into several courses	Module in one course	Do not offer
Clinical decision-making	235	23.8	74.0	0.9	1.3
Clinical medicine	236	82.6	16.1	0.4	0.8
Electrocardiology	236	25.4	51.7	22.0	0.8
History/Interviewing skills	236	54.7	41.9	3.4	0.0
Laboratory medicine/Imaging/Diagnostics	236	49.2	47.5	3.0	0.4
Physical assessment/Examination skills	235	77.0	21.7	0.9	0.4
Point-of-care ultrasound (POCUS)	235	3.4	46.8	16.2	33.6
Technical skills/Procedures	235	53.2	44.3	2.6	0.0

TABLE 18. CLINICAL PREPARATORY CLASSES: REQUIRED CONTACT HOURS

	<i>n</i>	Min	Max	<i>M</i>	<i>SD</i>	P10	P25	P50 (<i>Mdn</i>)	P75	P90
Clinical decision-making										
Lecture	199	1.0	1,600.0	81.0	148.7	5.8	20.0	45.0	85.0	156.0
Lab	107	3.0	380.0	51.9	49.1	12.0	21.5	40.0	61.0	100.8
Clinical medicine										
Lecture	227	3.0	1,056.0	266.3	167.9	98.4	166.5	240.0	339.0	437.8
Lab	53	4.0	186.0	54.5	41.8	10.8	20.0	40.0	75.0	109.6
Electrocardiology										
Lecture	224	2.0	108.0	17.6	13.4	6.0	10.0	15.0	22.0	30.0
Lab	103	1.0	35.0	8.5	7.2	2.0	3.0	6.0	12.0	17.6
History/Interviewing skills										
Lecture	231	2.0	200.0	35.6	31.6	10.0	15.0	28.0	45.0	75.0
Lab	163	1.0	200.0	33.3	33.9	5.0	10.0	20.0	45.0	69.6
Laboratory medicine/Imaging/Diagnostics										
Lecture	228	2.0	220.0	46.3	34.2	15.0	20.0	38.5	60.0	90.0
Lab	101	1.0	150.0	22.3	26.6	4.0	6.0	15.0	30.0	45.0
Physical assessment/Examination skills										
Lecture	223	3.0	220.0	51.0	36.5	18.4	27.0	43.0	60.0	96.0
Lab	200	4.0	270.0	58.8	41.6	20.0	30.0	45.0	72.0	116.4
Point-of-care ultrasound (POCUS)										
Lecture	131	1.0	100.0	7.1	11.4	2.0	2.0	4.0	7.2	15.0
Lab	118	1.0	176.0	10.4	18.3	2.0	3.0	5.5	12.0	20.0
Technical skills/Procedures										
Lecture	203	2.0	300.0	31.2	33.5	8.0	12.5	20.0	40.0	60.0
Lab	193	4.0	260.0	41.3	35.3	14.2	20.0	30.0	48.0	80.0

Note: Only programs that reported a minimum number of required contact hours are reported here. If a program left the question blank or entered "0," they were excluded from this table.

FIGURE 7. CLINICAL PREPARATORY COURSES: AVERAGE REQUIRED CONTACT HOURS

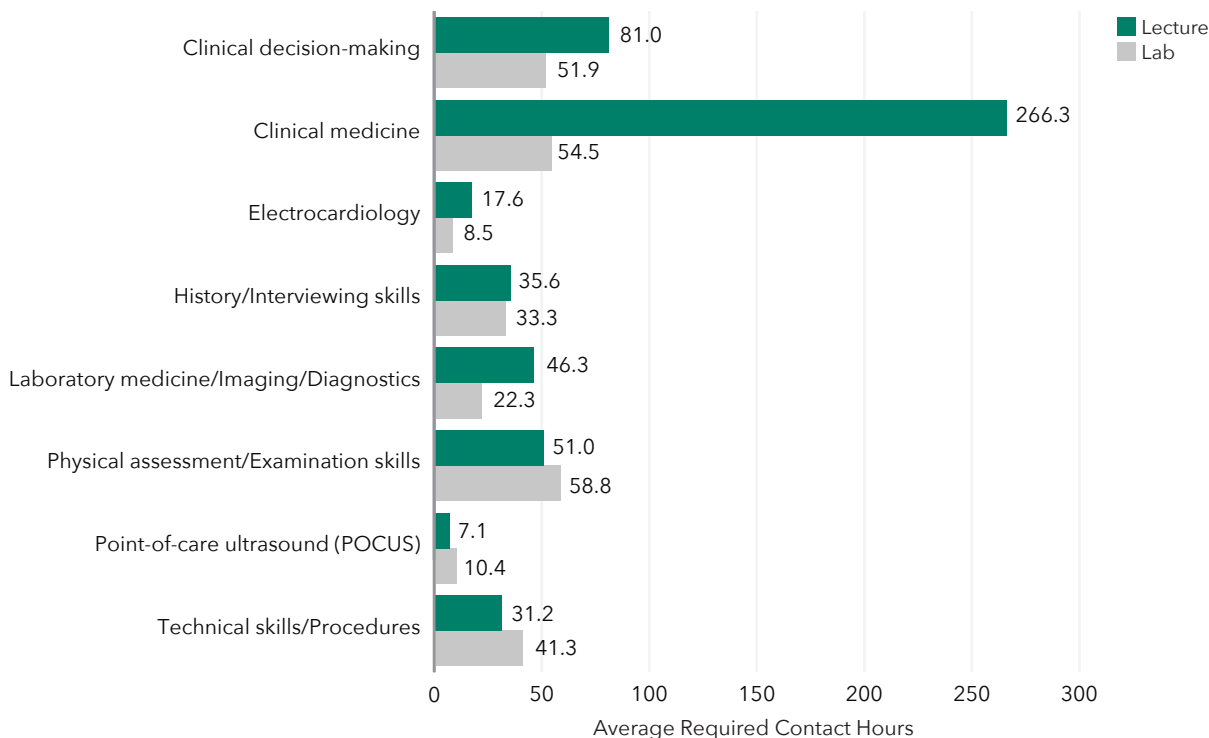


TABLE 19. CLINICAL PREPARATORY CLASSES: MODES OF INSTRUCTION (%)

	<i>n</i>	Lecture only	Lab only	Lecture/lab combination	Seminar	Self-instructional	Case-based/TBL/PBL
Clinical decision-making							
Primary mode	231	22.1	1.3	42.9	2.6	0.0	31.2
Secondary mode	122	18.9	1.6	10.7	3.3	4.1	61.5
Clinical medicine							
Primary mode	234	76.1	0.4	18.8	0.0	0.0	4.7
Secondary mode	116	10.3	4.3	2.6	2.6	3.4	76.7
Electrocardiology							
Primary mode	233	45.5	1.7	49.8	1.7	0.0	1.3
Secondary mode	104	6.7	11.5	14.4	2.9	12.5	51.9
History/Interviewing skills							
Primary mode	235	14.9	0.9	81.3	1.3	0.0	1.7
Secondary mode	107	6.5	15.0	10.3	1.9	7.5	58.9
Laboratory medicine/Imaging/Diagnostics							
Primary mode	235	52.8	0.4	44.3	0.0	0.0	2.6
Secondary mode	105	7.6	9.5	12.4	1.0	8.6	61.0
Physical assessment/Examination skills							
Primary mode	234	7.7	3.8	87.6	0.0	0.0	0.9
Secondary mode	103	4.9	13.6	17.5	2.9	6.8	54.4
Point-of-care ultrasound (POCUS)							
Primary mode	154	12.3	14.3	69.5	2.6	0.6	0.6
Secondary mode	53	11.3	17.0	26.4	5.7	13.2	26.4
Technical skills/Procedures							
Primary mode	233	5.6	12.0	82.0	0.0	0.0	0.4
Secondary mode	88	8.0	19.3	19.3	1.1	12.5	39.8

TABLE 20. CLINICAL PREPARATORY CLASSES: MODES OF ASSESSMENT (%)

	<i>n</i>	Multiple-choice	Practical exams	OSCEs	Writing assignment	Oral presentation	Portfolio
Clinical decision-making							
Primary mode	229	56.3	10.9	17.0	9.6	5.7	0.4
Secondary mode	160	13.8	15.0	48.1	10.0	13.1	0.0
Clinical medicine							
Primary mode	234	97.4	0.9	0.4	0.9	0.4	0.0
Secondary mode	107	11.2	15.9	50.5	16.8	5.6	0.0
Electrocardiology							
Primary mode	231	82.7	13.9	1.3	2.2	0.0	0.0
Secondary mode	112	18.8	46.4	21.4	13.4	0.0	0.0
History/Interviewing skills							
Primary mode	235	40.9	24.7	23.0	8.9	2.6	0.0
Secondary mode	173	17.9	20.2	44.5	9.8	7.5	0.0
Laboratory medicine/Imaging/Diagnostics							
Primary mode	234	88.5	10.3	0.4	0.9	0.0	0.0
Secondary mode	119	19.3	35.3	35.3	9.2	0.8	0.0
Physical assessment/Examination skills							
Primary mode	233	33.9	45.1	20.6	0.0	0.4	0.0
Secondary mode	183	32.8	28.4	34.4	1.6	2.7	0.0
Point-of-care ultrasound (POCUS)							
Primary mode	146	39.7	50.0	4.8	0.7	0.7	4.1
Secondary mode	59	50.8	32.2	11.9	1.7	0.0	3.4
Technical skills/Procedures							
Primary mode	233	28.3	64.8	4.3	0.4	0.4	1.7
Secondary mode	146	42.5	39.7	14.4	1.4	0.7	1.4

SECTION 4. BEHAVIORAL & SOCIAL SCIENCES

Programs were asked to report on the following behavioral and social science courses:

- Behavioral medicine*
- Counseling skills
- Human sexuality
- Psychiatry*
- Psychological development
- Psychological/Interpersonal/Cultural health factors
- Substance Use Disorder (SUD; includes addiction and substance use/abuse)

Programs could also report about “other” clinical preparatory science courses. Examples of these courses include trauma-informed care, emotional intelligence, and domestic violence. Due to low frequencies, these results were not included in the current report. Courses in the list above marked with an asterisk (*) were added to the 2019 survey based on the most frequently listed “other” behavioral and social science courses reported by programs in the 2016 survey.

TABLE 21. BEHAVIORAL AND SOCIAL SCIENCES: COURSE STRUCTURE (%)

	<i>n</i>	Stand-alone/ Distinct	Integrated into several courses	Module in one course	Do not offer
Behavioral medicine	236	55.9	33.9	8.5	1.7
Counseling skills	236	3.4	88.6	5.9	2.1
Human sexuality	234	1.7	86.3	10.7	1.3
Psychiatry	235	33.2	46.0	14.9	6.0
Psychological development	232	3.4	82.8	7.3	6.5
Psychological/Interpersonal/Cultural health factors	234	8.5	82.9	7.3	1.3
Substance Use Disorder (SUD)	232	1.7	87.5	9.5	1.3

TABLE 22. BEHAVIORAL AND SOCIAL SCIENCES: REQUIRED CONTACT HOURS

	<i>n</i>	Min	Max	<i>M</i>	<i>SD</i>	P10	P25	P50 (<i>Mdn</i>)	P75	P90
Behavioral medicine										
Lecture	220	0.5	172.0	28.5	21.6	6.0	12.0	28.5	40.0	48.0
Lab	24	0.5	30.0	8.6	6.7	3.0	4.0	6.0	12.2	14.7
Counseling skills										
Lecture	219	1.0	106.0	13.2	16.1	2.0	4.0	8.0	15.0	30.0
Lab	79	1.0	60.0	9.1	10.7	2.0	3.0	5.0	10.5	20.0
Human sexuality										
Lecture	223	1.0	100.0	7.2	8.6	2.0	3.0	5.0	10.0	15.0
Lab	20	1.0	13.0	3.4	3.0	1.0	1.8	2.5	4.0	7.1
Psychiatry										
Lecture	206	1.0	150.0	24.2	17.5	7.0	12.0	20.0	30.0	45.0
Lab	19	2.0	30.0	6.3	6.4	2.0	3.0	5.0	6.0	10.6
Psychological development										
Lecture	207	1.0	100.0	7.6	9.5	2.0	3.0	5.0	10.0	15.4
Lab	5	2.0	13.0	4.8	4.7	2.0	2.0	3.0	4.0	9.4
Psychological/Interpersonal/Cultural health factors										
Lecture	222	1.0	139.0	12.7	15.4	2.0	4.0	8.0	15.0	30.0
Lab	25	1.0	20.0	5.7	6.0	1.0	2.0	3.0	6.0	16.6
Substance Use Disorder (SUD)										
Lecture	210	1.0	100.0	10.0	10.8	2.0	4.0	6.0	12.0	24.0
Lab	18	1.0	24.0	4.9	5.8	2.0	2.0	2.0	4.0	10.9

Note: Only programs that reported a minimum number of required contact hours are reported here. If a program left the question blank or entered "0," they were excluded from this table.

FIGURE 8. BEHAVIORAL AND SOCIAL SCIENCES: AVERAGE REQUIRED CONTACT HOURS

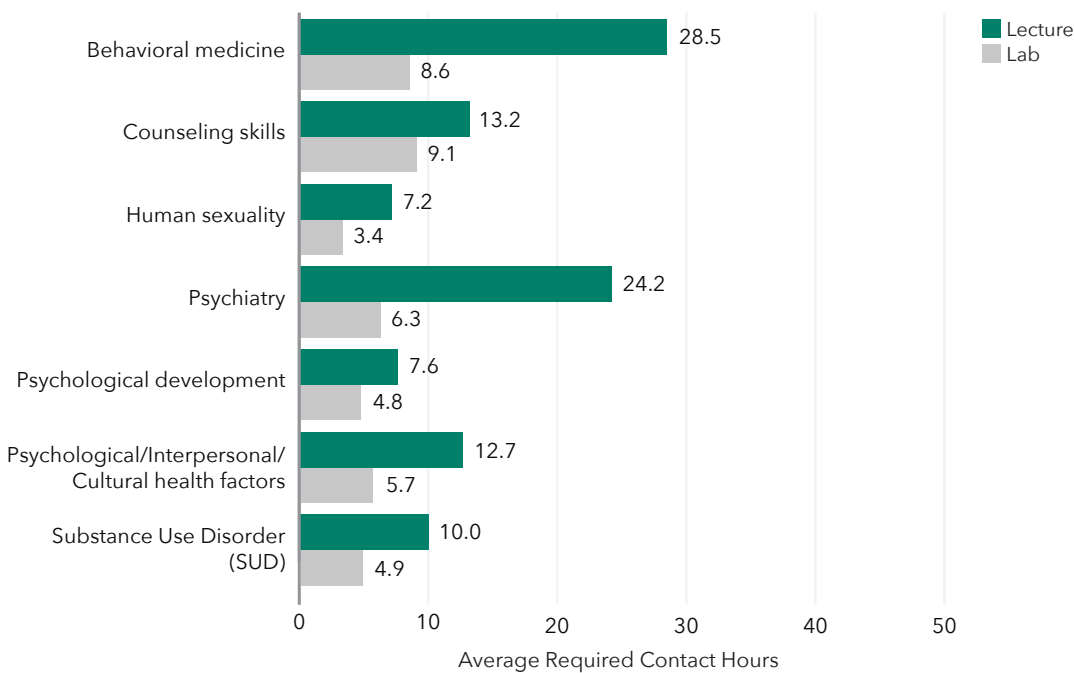


TABLE 23. BEHAVIORAL AND SOCIAL SCIENCES: MODES OF INSTRUCTION (%)

	<i>n</i>	Lecture only	Lab only	Lecture/lab combination	Seminar	Self-instructional	Case-based/TBL/PBL
Behavioral medicine							
Primary mode	231	78.8	0.0	13.9	1.3	0.0	6.1
Secondary mode	81	16.0	0.0	2.5	7.4	9.9	64.2
Counseling skills							
Primary mode	229	42.8	0.9	45.4	2.6	0.0	8.3
Secondary mode	85	15.3	8.2	7.1	8.2	3.5	57.6
Human sexuality							
Primary mode	230	83.9	0.0	8.7	3.5	0.4	3.5
Secondary mode	63	27.0	0.0	0.0	6.3	14.3	52.4
Psychiatry							
Primary mode	218	81.7	0.0	12.8	0.5	0.0	5.0
Secondary mode	65	23.1	3.1	3.1	6.2	7.7	56.9
Psychological development							
Primary mode	215	93.0	0.0	2.8	0.0	0.0	4.2
Secondary mode	58	24.1	0.0	3.4	3.4	12.1	56.9
Psychological/Interpersonal/Cultural health factors							
Primary mode	230	78.3	0.0	12.6	3.0	0.4	5.7
Secondary mode	80	15.0	1.2	2.5	10.0	6.2	65.0
Substance Use Disorder (SUD)							
Primary mode	227	84.1	0.0	7.9	0.9	3.1	4.0
Secondary mode	81	18.5	1.2	0.0	17.3	12.3	50.6

TABLE 24. BEHAVIORAL AND SOCIAL SCIENCES: MODES OF ASSESSMENT (%)

	<i>n</i>	Multiple-choice	Practical exams	OSCEs	Writing assignment	Oral presentation	Portfolio
Behavioral medicine							
Primary mode	231	93.5	1.7	0.9	3.5	0.4	0.0
Secondary mode	90	15.6	12.2	41.1	20.0	11.1	0.0
Counseling skills							
Primary mode	227	50.2	19.8	23.8	4.0	2.2	0.0
Secondary mode	107	19.6	16.8	45.8	12.1	5.6	0.0
Human sexuality							
Primary mode	229	89.5	3.1	0.9	5.2	1.3	0.0
Secondary mode	67	38.8	16.4	25.4	14.9	4.5	0.0
Psychiatry							
Primary mode	218	97.2	0.9	0.5	0.9	0.5	0.0
Secondary mode	72	23.6	18.1	40.3	16.7	1.4	0.0
Psychological development							
Primary mode	215	96.3	1.4	0.0	2.3	0.0	0.0
Secondary mode	58	34.5	13.8	31.0	15.5	5.2	0.0
Psychological/Interpersonal/Cultural health factors							
Primary mode	230	82.2	3.0	3.0	8.7	3.0	0.0
Secondary mode	84	22.6	14.3	29.8	26.2	7.1	0.0
Substance Use Disorder (SUD)							
Primary mode	216	93.5	0.9	1.9	2.8	0.5	0.5
Secondary mode	70	31.4	11.4	28.6	18.6	7.1	2.9

SECTION 5. HEALTH POLICY & PROFESSIONAL PRACTICE

Programs were asked to report on the following health policy and professional practice courses:

- Coding and billing
- Cultural and socioeconomic issues
- Medical ethics
- PA professional issues (includes legal and policy issues)
- Provider health and well-being (includes burnout prevention)
- Public health topics (includes health promotion and preventative medicine)
- Quality improvement/Patient safety

Programs could also report about “other” health policy and professional practice courses. Examples of these courses include contract negotiations, licensing and credentialing, and interprofessional practice. Due to low frequencies, these results were not included in the current report.

TABLE 25. HEALTH POLICY AND PROFESSIONAL PRACTICE COURSES: COURSE STRUCTURE (%)

	<i>n</i>	Stand-alone/ Distinct	Integrated into several courses	Module in one course	Do not offer
Coding and billing	234	2.6	73.1	23.1	1.3
Cultural and socioeconomic issues	233	6.0	84.1	9.4	0.4
Medical ethics	236	41.9	48.7	9.3	0.0
PA professional issues	235	47.2	43.0	9.8	0.0
Provider health and well-being	234	1.7	71.8	13.7	12.8
Public health topics	235	26.4	64.3	8.9	0.4
Quality improvement/Patient safety	233	3.9	83.7	12.4	0.0

TABLE 26. HEALTH POLICY AND PROFESSIONAL PRACTICE COURSES: REQUIRED CONTACT HOURS

	<i>n</i>	Min	Max	<i>M</i>	<i>SD</i>	P10	P25	P50 (<i>Mdn</i>)	P75	P90
Coding and billing										
Lecture	227	1.0	30.0	4.7	3.7	2.0	2.0	4.0	6.0	10.0
Lab	24	1.0	15.0	3.1	3.5	1.0	1.0	2.0	3.2	5.4
Cultural and socioeconomic issues										
Lecture	226	1.0	100.0	13.0	12.4	3.0	5.0	10.0	16.0	30.0
Lab	17	1.0	20.0	6.2	5.2	2.0	2.0	4.0	10.0	11.2
Medical ethics										
Lecture	229	1.0	60.0	16.3	13.7	2.4	6.0	12.0	24.0	40.0
Lab	21	1.0	15.0	5.2	3.5	2.0	3.0	4.0	8.0	10.0
PA professional issues										
Lecture	230	1.0	65.0	16.6	13.1	4.0	8.0	15.0	20.0	32.0
Lab	9	1.0	11.0	4.9	3.9	1.0	2.0	4.0	8.0	10.2
Provider health and well-being										
Lecture	197	1.0	43.0	4.9	5.0	2.0	2.0	4.0	5.0	10.0
Lab	4	1.0	30.0	9.2	13.9	1.3	1.8	3.0	10.5	22.2
Public health topics										
Lecture	227	1.0	200.0	19.1	21.7	4.0	6.0	12.0	30.0	41.6
Lab	13	2.0	45.0	9.2	11.7	2.0	3.0	4.0	8.0	15.8
Quality improvement/Patient safety										
Lecture	227	1.0	45.0	6.7	7.0	2.0	2.0	4.0	8.0	15.0
Lab	9	1.0	23.0	7.8	7.4	1.8	3.0	4.0	12.0	16.6

Note: Only programs that reported a minimum number of required contact hours are reported here. If a program left the question blank or entered "0," they were excluded from this table.

FIGURE 9. HEALTH POLICY AND PROFESSIONAL PRACTICE COURSES: AVERAGE REQUIRED CONTACT HOURS

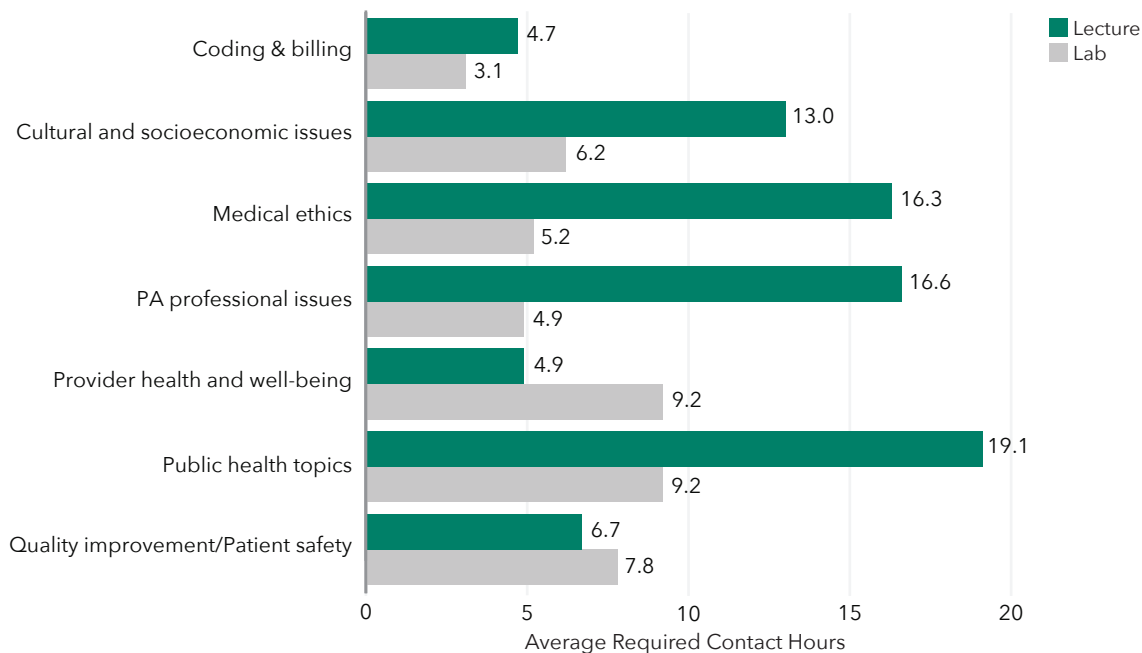


TABLE 27. HEALTH POLICY AND PROFESSIONAL PRACTICE COURSES: MODES OF INSTRUCTION (%)

	<i>n</i>	Lecture only	Lab only	Lecture/lab combination	Seminar	Self-instructional	Case-based/TBL/PBL
Coding and billing							
Primary mode	229	82.5	0.0	9.6	5.2	1.7	0.9
Secondary mode	67	25.4	3.0	1.5	9.0	1.9	46.3
Cultural and socioeconomic issues							
Primary mode	229	75.5	0.0	11.8	7.0	1.7	3.9
Secondary mode	83	20.5	3.6	1.2	10.8	10.8	53.0
Medical ethics							
Primary mode	234	79.5	0.0	7.7	4.3	2.1	6.4
Secondary mode	103	17.5	2.9	1.9	8.7	4.9	64.1
PA professional issues							
Primary mode	231	90.0	0.4	3.9	3.5	0.4	1.7
Secondary mode	75	16.0	1.3	0.0	20.0	17.3	45.3
Provider health and well-being							
Primary mode	201	84.1	0.0	6.0	6.0	2.0	2.0
Secondary mode	59	20.3	0.0	1.7	16.9	15.3	45.8
Public health topics							
Primary mode	232	85.3	0.0	10.3	2.2	0.4	1.7
Secondary mode	79	20.3	1.3	1.3	10.1	10.1	57.0
Quality improvement/Patient safety							
Primary mode	230	84.3	0.4	6.5	4.3	1.7	2.6
Secondary mode	77	26.0	2.6	3.9	9.1	10.4	48.1

TABLE 28. HEALTH POLICY AND PROFESSIONAL PRACTICE COURSES: MODES OF ASSESSMENT (%)

	<i>n</i>	Multiple choice	Practical exams	OSCEs	Writing assignment	Oral presentation	Portfolio
Coding and billing							
Primary mode	225	70.7	8.4	0.9	14.2	0.9	4.9
Secondary mode	56	30.4	10.7	8.9	35.7	5.4	8.9
Cultural and socioeconomic issues							
Primary mode	226	65.5	2.2	4.4	18.6	8.0	1.3
Secondary mode	89	24.7	9.0	24.7	28.1	13.5	0.0
Medical ethics							
Primary mode	230	60.0	1.7	1.7	28.7	7.4	0.4
Secondary mode	99	21.2	4.0	10.1	35.4	26.3	3.0
PA professional issues							
Primary mode	228	69.7	0.9	0.0	21.9	5.7	1.8
Secondary mode	70	28.6	4.3	8.6	37.1	17.1	4.3
Provider health and well-being							
Primary mode	194	69.6	2.1	1.0	19.1	3.1	5.2
Secondary mode	52	38.5	1.9	9.6	36.5	9.6	3.8
Public health topics							
Primary mode	229	76.4	1.3	0.4	15.3	6.1	0.4
Secondary mode	88	27.3	5.7	11.4	34.1	19.3	2.3
Quality improvement/Patient safety							
Primary mode	225	72.0	2.7	0.9	20.9	1.8	1.8
Secondary mode	70	37.1	7.1	10.0	30.0	12.9	2.9

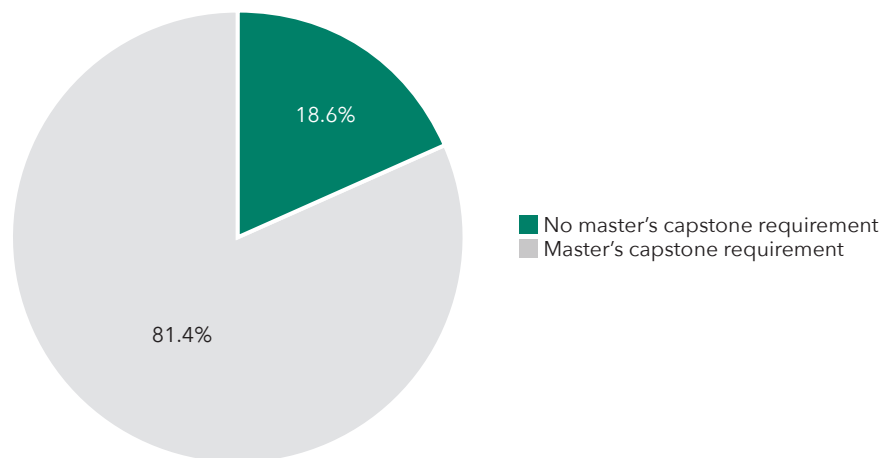
SECTION 6. RESEARCH

Programs were asked to report on the following research courses:

- Biostatistics
- Epidemiology
- Evidence-based medicine
- Research methodology
- Thesis/Capstone project

Programs could also report about “other” research courses. Examples of these courses include scholarly or scientific writing and interpretation of medical literature. Due to low frequencies, these results were not included in the current report.

FIGURE 10. REQUIREMENT OF MASTER’S CAPSTONE OR OTHER PROJECT



Note: n = 236

TABLE 29. TYPE OF MASTER’S CAPSTONE

	n	%
Scholarly paper (e.g., review of literature)	105	54.7
Project	46	24.0
Original research (e.g., thesis)	16	8.3
Other		
Student may select from multiple options (e.g., case report or literature review)	8	4.2
Multiple research-related requirements (e.g., scholarly paper and poster presentation)	8	4.2
All other types of capstones	9	4.7
Total	192	100.0

Note: Only programs that required students to complete a master’s capstone or similar project were asked to respond to this question. The types of capstone under “Other” were categorized based on programs’ write-in descriptions.

TABLE 30. RESEARCH COURSES: COURSE STRUCTURE (%)

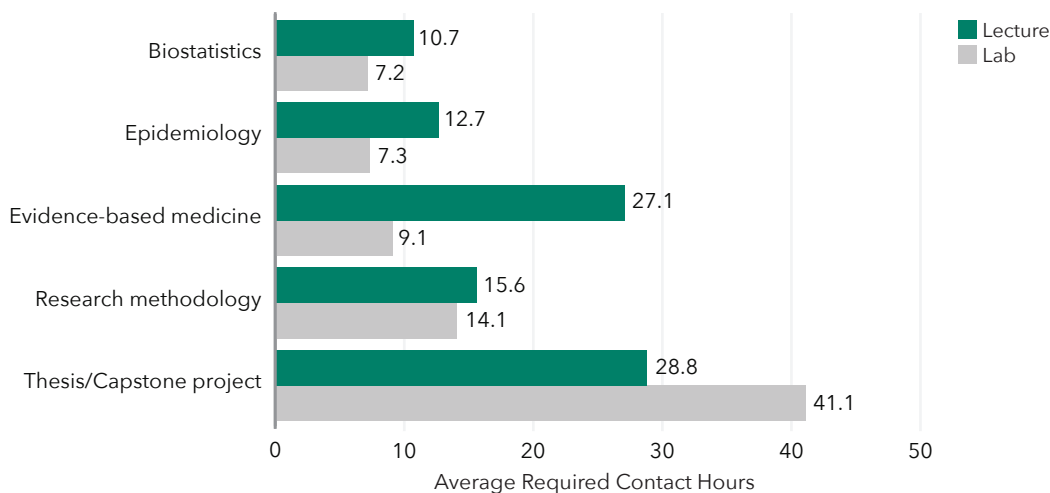
	<i>n</i>	Stand-alone/ Distinct	Integrated into several courses	Module in one course	Do not offer
Biostatistics	235	13.2	61.3	13.2	12.3
Epidemiology	235	12.8	69.4	9.8	8.1
Evidence-based medicine	235	42.6	50.2	6.4	0.9
Research methodology	236	35.2	50.4	11.0	3.4
Thesis/Capstone project	230	59.6	20.9	3.5	16.1

TABLE 31. RESEARCH COURSES: REQUIRED CONTACT HOURS

	<i>n</i>	Min	Max	<i>M</i>	<i>SD</i>	P10	P25	P50 (<i>Mdn</i>)	P75	P90
Biostatistics										
Lecture	197	1.0	60.0	10.7	11.3	2.0	4.0	6.0	15.0	21.6
Lab	12	1.0	30.0	7.2	7.8	2.0	3.5	5.0	8.0	11.6
Epidemiology										
Lecture	208	1.0	180.0	12.7	17.6	2.0	4.0	8.0	15.0	30.0
Lab	3	2.0	10.0	7.3	4.6	3.6	6.0	10.0	10.0	10.0
Evidence-based medicine										
Lecture	225	1.0	357.5	27.1	43.4	5.0	10.0	15.0	30.0	48.0
Lab	15	2.0	30.0	9.1	7.9	2.8	4.5	7.0	9.0	19.8
Research methodology										
Lecture	221	1.0	90.0	15.6	14.2	2.0	5.0	12.0	20.0	40.0
Lab	7	3.0	30.0	14.1	11.3	3.6	6.0	8.0	23.0	28.8
Thesis/Capstone project										
Lecture	175	1.0	160.0	28.8	28.1	4.0	10.0	20.0	45.0	60.0
Lab	27	2.0	180.0	41.1	44.8	4.0	10.0	30.0	52.5	90.0

Note: Only programs that reported a minimum number of required contact hours are reported here. If a program left the question blank or entered "0," they were excluded from this table.

FIGURE 11. RESEARCH COURSES: AVERAGE REQUIRED CONTACT HOURS



SECTION 7. CERTIFICATIONS

Programs were asked to report whether the following certifications were required and, if so, how they were incorporated into the didactic curriculum:

- Advanced Cardiac Life Support (ACLS)
- Basic Life Support (BLS)
- Child abuse/neglect
- Health Insurance Portability and Accountability Act (HIPAA)
- Pediatric Advanced Life Support (PALS)

TABLE 32. CERTIFICATIONS (%)

	<i>n</i>	Required, but not included in program's curriculum	Separate course in program's curriculum	Integrated into other courses	Not required
Advanced Cardiac Life Support (ACLS)	236	21.6	30.1	45.8	2.5
Basic Life Support (BLS)	236	36.0	23.3	39.8	0.8
Child abuse/neglect	232	3.0	2.2	82.8	12.1
Health Insurance Portability and Accountability Act (HIPAA)	235	15.7	3.8	78.3	2.1
Pediatric Advanced Life Support (PALS)	233	4.7	6.9	18.0	70.4

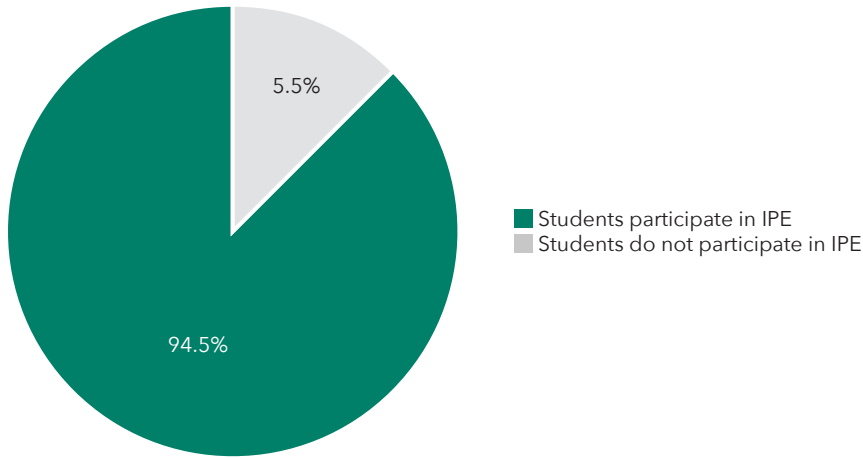
In addition to the above certifications, programs were able to report up to three “other” certifications completed by their students. The “other” certifications reported most frequently are presented below.

TABLE 33. OTHER CERTIFICATIONS (%)

	<i>n</i>	Required, but not included in program's curriculum	Separate course in program's curriculum	Integrated into other courses
Medication-Assisted Treatment (MAT) waiver	17	29.4	5.9	64.7
Infection control	9	44.4	33.3	22.2
Occupational Safety and Health Administration (OSHA)	6	33.3	0.0	66.7
Collaborative Institutional Training Initiative (CITI)	5	0.0	0.0	100.0

SECTION 8. INTERPROFESSIONAL EDUCATION

FIGURE 12. IPE



Programs were asked whether their students interacted with other health professions students, as opposed to simply being in the same classroom or laboratory course.

Note: n = 237

TABLE 34. PERCENTAGE (%) OF TOTAL DIDACTIC CURRICULUM DEVOTED TO IPE BY TYPE OF PROGRAM

	n	Min	Max	M	SD	P10	P25	P50 (Mdn)	P75	P90
Overall	218	0.5	44.0	6.2	6.0	1.0	2.0	5.0	9.5	10.0
Type of institution										
Private	145	0.5	44.0	5.7	6.0	1.0	2.0	5.0	6.0	10.0
Public	67	1.0	30.0	7.2	6.0	2.0	5.0	5.0	10.0	15.0
Academic Health Center status										
Not AHC	159	0.5	33.0	6.1	5.4	1.0	2.0	5.0	10.0	10.0
AHC	59	0.7	44.0	6.5	7.4	1.0	2.5	5.0	5.5	10.0

Note: Only programs that provided an estimate are reported here. If a program left the question blank or entered "0," they were excluded from this table.

TABLE 35. OTHER HEALTH PROFESSIONS STUDENTS THAT PA STUDENTS ROUTINELY INTERACT WITH

	<i>n</i>	%
Athletic training	60	27.5
Audiology	19	8.7
Dental hygiene	18	8.3
Medicine	123	56.4
Residents	67	30.7
Nursing (undergraduate)	128	58.7
Nursing (advanced practice)	78	35.8
Dentistry	25	11.5
Occupational therapy	89	40.8
Optometry	11	5.0
Paramedic/EMT	20	9.2
Pharmacy	96	44.0
Physical therapy	116	53.2
Public health	42	19.3
Radiology	11	5.0
Radiography	9	4.1
Respiratory therapy	22	10.1
Social work	59	27.1
Speech pathology	49	22.5
Other		
Nutrition and dietetics	10	4.6
Genetic counseling	5	2.3
All other health professions students	37	17.0
Total	218	-

Note: Percentages will sum to more than 100% because programs could select multiple types of health professions students. The health professions students under "Other" were categorized based on programs' write-in descriptions. "Other" health professions students were only reported if 5 or more programs wrote in that response.

FIGURE 13. OTHER HEALTH PROFESSIONS STUDENTS THAT PA STUDENTS ROUTINELY INTERACT WITH

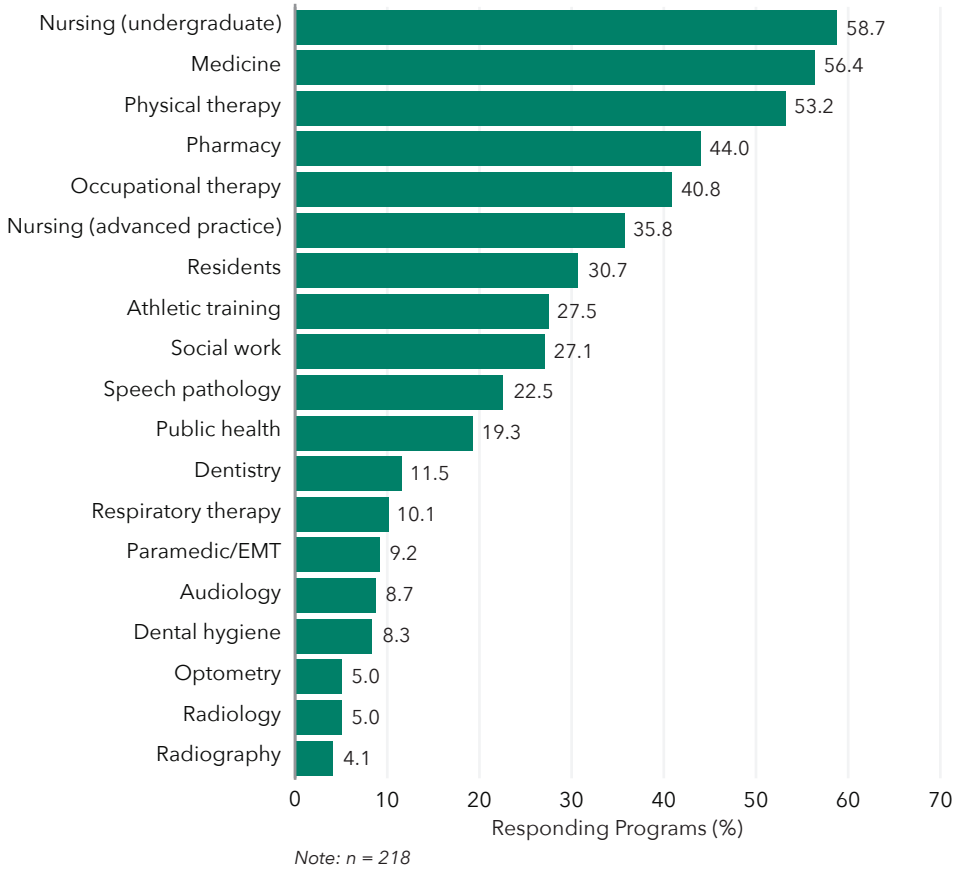


TABLE 36. IPE IN CLASSROOM AND LABORATORY SETTINGS

	n	%
IPE seminar or series of seminars	147	67.4
Case studies or case-based learning	134	61.5
Health fairs and community events/service learning (required)	94	43.1
Campus-wide simulation/mock disaster	58	26.6
OSCE: Simulation	54	24.8
OSCE: Standardized patient	46	21.1
Anatomy lab	41	18.8
Clinical medicine	34	15.6
Stand-alone IPE course	34	15.6
Anatomy lecture	29	13.3
PA professional issues course	25	11.5
History and physical exam lab	23	10.6
Pharmacology or pharmacotherapeutics course	20	9.2
Physiology or biochemistry course	20	9.2
Medical ethics course	19	8.7
Research course	10	4.6
Other classroom/laboratory settings	1	0.5
Total	218	-

Programs were asked to indicate the classroom and/or laboratory settings in which their PA students engaged in interprofessional learning.

Note: Percentages will sum to more than 100% because programs could report multiple settings.

TABLE 37. REGULAR EXTRACURRICULAR IPE ACTIVITIES

	n	%
Community health fairs	122	62.6
Interprofessional student groups	109	55.9
Health screenings in community settings	105	53.8
Volunteering as medical support at community events	77	39.5
Non-medical community service	71	36.4
Student-run clinic or volunteering at a clinic for underserved	70	35.9
Mission trips	69	35.4
Fundraising events	64	32.8
Conducting free sports physicals	22	11.3
Providing care from a free mobile health clinic	19	9.7
Providing care to migrant farm workers	10	5.1
Other extracurricular IPE activities	24	12.3
Total	195	-

Programs were asked to select extracurricular activities that occurred on a regular basis where their PA students interacted with other health professions students. Of 220 responding programs, 25 (11.4%) were not included in this table because they selected "None."

Note: Percentages will sum to more than 100% because programs could report multiple activities.