

# Hospital Privileges for Graduates of Family Practice Residency Programs

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In 1979 the American Academy of Family Physicians, as the first phase of a long-range study of family practice residency outcomes, surveyed graduates for the years 1970 through 1978 who were diplomates of the American Board of Family Practice. This report is limited to an overview analysis of the hospital admission and practice privileges of the 3,021 respondents actively practicing family medicine in the United States.

A higher percentage of respondents in census regions west of the Mississippi River were more likely to have privileges in obstetrics and surgery than were respondents in eastern regions. Respondents in nonmetropolitan areas were more likely to have hospital privileges than were respondents in metropolitan areas.

Few data exist that document the hospital privileges of general practitioners or family physicians. Most studies in this area have been limited to one geographical area or state.<sup>1-3</sup> While uncovering no severe limitations in any area of hospital privileges, these studies have nevertheless been limited in value because of methods of data collection as well as their narrow scope of information. The data were collected from hospital administrators and as such may reflect hospital bylaws rather than the application of those bylaws.

In 1969 the (then) American Academy of General Practice (AAGP) conducted a survey regarding members' hospital practices and satisfaction with those practices. Of the 19,257 respondents 96 percent were satisfied with their hospital practices; only 4 percent indicated they were unduly

restricted.<sup>4</sup> In 1980 the American Academy of Family Physicians (AAFP) sampled its members to again ascertain the depth and breadth of members' hospital practices and degree of satisfaction. Similar to the 1969 survey results, 95.4 percent of the AAFP members in 1980 with hospital admission privileges reported they were satisfied with their privileges.<sup>5</sup>

In the same year the 1969 study was conducted by the Academy, family practice was recognized as a primary specialty with the creation of the American Board of Family Practice. During the next 11 years approved residency programs in family practice grew from the original 15 to 382, and more than 8,400 physicians have graduated from 1970 to August 1980.

The purposes of this study are threefold: (1) to assess the hospital privileges of these graduates, (2) to provide family practice program directors with data which correlate the learning process to the delivery of care by these graduates, and (3) to provide data to the state and federal legislative bodies that have funded residencies in family practice during the past decade.

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## Methods

Since the names and addresses of all graduates of family practice residencies were not available, the study was limited to include only graduates of family practice residency programs between 1970 and 1978 who were diplomates of the American Board of Family Practice. This target population included the names of 4,295 physicians who were based in the United States. The survey was mailed in the summer of 1979, and 3,302 physicians had returned questionnaires by January 1980 for an effective response rate of 76.9 percent. By census region, response rates varied from 83.5 percent for the Mountain region to 71.1 percent for the Middle Atlantic states (Table 1).

Of the 3,302 physicians responding, there were 281 physicians whose current practice was limited to emergency medicine, military assignment, public health service, or who were in further training in family practice or another medical specialty, part-time practice only, or no current practice activity. Because the practices of these 281 physicians differed markedly from the practices of the remaining 3,021 respondents, they were excluded from the study. All percentages listed below relate to the 3,021 physicians comprising the respondent group of graduates of family practice residency programs between 1970 and 1978 who are United States based, diplomates of the American Board of Family Practice, and actively practicing family medicine.

For comparative purposes, data are presented at the regional level; the map of the United States is divided into nine census regions for easy reference.<sup>5</sup> Within each region comparisons are made among physicians practicing in an SMSA vs physicians not practicing in an SMSA. An SMSA (standard metropolitan statistical area) is defined as having either one city of 50,000 or more inhabitants or one city with at least 25,000 inhabitants, which when combined with contiguous areas having a density of 1,000 or more people per square mile, will have a population of at least 50,000. Several contiguous counties, however, have been declared SMSAs by the federal government without meeting this definition. Although the classification of practice locations into SMSA vs non-SMSA should not be lightly termed "urban vs rural," the distinction does provide some insights into how graduates are practicing within these settings.

Table 1. Survey Response Rates by Region, 1979

	Total Surveyed	Respondents	Response Rate
New England	173	140	80.9
Middle Atlantic	492	350	71.1
East North Central	724	554	76.5
West North Central	498	409	82.1
South Atlantic	809	615	76.0
East South Central	184	133	72.3
West South Central	322	248	77.0
Mountain	316	264	83.5
Pacific	777	589	75.8
Total	4,295	3,302	76.9

Although an attempt was made to obtain a 100 percent response in this census survey, the actual response rate of 76.9 percent fell short of that goal. There has been extensive debate in the literature concerning the use of significance tests in dealing with the entire population. If one were interested in the causal processes that may have influenced the population data, then tests of significance would seem appropriate. Thus, differences between proportions in this study were compared by a standardized normal Z using a significance level set at  $P < .05$ .<sup>6</sup>

## Results

Demographic, medical education, and practice characteristics of the respondents are available in earlier publications reporting results of this study.<sup>7,8</sup> Nine in ten respondents were identified as having hospital admission privileges in pediatrics (92.5 percent), special units including intensive care and coronary care (88.8 percent), family practice (93.2 percent), and medicine (93.5 percent). Those respondents who did not have admission privileges were more than likely to have no hospital nearby or to have chosen not to apply for the admission privileges. Admission privileges alone, however, do not measure the scope of activities that respondents include in their hospital practices. Hospital practice privileges, or lack of them, reflect more accurately the scope of a respondent's inpatient practice. It is important



**Table 2. Percentage of Family Practice Residency Graduates by Region Having Hospital Practice Privileges in Routine Obstetric Care, 1979**

	Privileges in Routine Obstetric Care*	No Privileges in Routine Obstetric Care				
		No Interest	Lack of Training	Privileges Denied	Liability Costs Prohibitive	No Hospital or Not Reported
West North Central	93.1	4.1	0.0	0.8	0.3	1.8
Mountain	79.4	14.5	1.2	0.8	0.8	3.2
East North Central	78.5	16.9	0.7	0.6	2.1	1.3
West South Central	71.8	22.7	0.0	0.5	2.3	2.8
Pacific	71.6	19.2	0.2	0.8	5.3	2.9
East South Central	59.3	35.8	0.8	1.6	0.8	1.6
New England	52.2	34.6	5.1	2.2	0.0	5.9
South Atlantic	33.8	53.4	3.3	1.0	2.8	5.7
Middle Atlantic	33.3	54.8	1.8	1.8	5.1	3.3
Total	64.3	27.8	1.3	1.0	2.6	3.1

Note: Totals for each region add up to 100.0 percent

\*Those proportions contained within one box are not statistically significant at  $P < .05$ . Proportions contained in any one box are statistically significant at  $P < .05$  from the proportions contained in any other box

to determine not only what hospital privileges are afforded but also what reasons are given for the lack of privileges. Reasons for absence of hospital privileges explored in this study are lack of training, denial of privileges, lack of interest, or prohibitive liability costs.

### Obstetric Care

The majority of all respondents (64.3 percent) had hospital privileges in routine obstetric care (Table 2). The major reason listed by respondents without this privilege was lack of interest (27.8 percent). Less than 5 percent of the respondents indicated lack of training, privileges denied, or prohibitive liability costs as a reason for not practicing routine obstetric care in a hospital.

Regional comparisons point out sharp differences. While the highest percentage with hospital practice privileges in routine obstetric care was reported by 93.1 percent of the respondents practicing in the West North Central region, only one in three respondents practicing in the Middle Atlantic states (33.3 percent) or South Atlantic states (33.8 percent) have such privileges. The majority of all respondents practicing in each of the remaining six census regions reported hospital privileges in routine obstetric care. The major reason cited

by respondents in the Middle Atlantic states and South Atlantic states for lack of hospital privileges in routine obstetric care was lack of interest (54.8 percent and 53.4 percent, respectively).

Approximately four in ten respondents (37.6 percent) across the United States indicated hospital practice privileges in complicated obstetric care (Table 3). The major reason listed by respondents for not having such privileges was lack of interest (38.6 percent), followed by lack of training (11.2 percent), prohibitive liability costs (4.0 percent), and privileges denied (3.6 percent). The majority of all respondents (70.6 percent) in the West North Central states had privileges in complicated obstetric care, higher than the percentage of any other region. The only other regions with a majority of respondents reporting privileges in complicated obstetric care were the Mountain and West South Central regions (52.4 percent and 50.0 percent, respectively). In the Middle Atlantic states less than one in ten respondents (8.6 percent) had such privileges. In each region the major reason listed by respondents practicing without complicated obstetric care privileges was lack of interest; lack of training was the second major reason.

Approximately 13.9 percent of the total respondents from all regions indicated hospital practice privileges to perform cesarean sections (Table 4). The major reason listed by respondents



**Table 3. Percentage of Family Practice Residency Graduates by Region Having Hospital Practice Privileges in Complicated Obstetric Care, 1979**

	Privileges in Complicated Obstetric Care*	No Privileges in Complicated Obstetric Care				
		No Interest	Lack of Training	Privileges Denied	Liability Costs Prohibitive	No Hospital or Not Reported
West North Central	70.6	14.5	5.8	2.8	1.3	5.1
Mountain	52.4	28.6	8.1	2.8	2.4	5.6
West South Central	50.0	29.6	7.9	1.9	6.0	4.6
Pacific	43.0	34.1	9.0	4.2	6.3	3.4
East North Central	40.8	31.1	14.0	4.5	5.2	4.3
East South Central	33.3	48.0	8.1	5.7	0.8	4.1
New England	20.6	41.9	27.2	2.9	1.5	5.9
South Atlantic	15.3	59.7	12.2	2.4	2.9	7.9
Middle Atlantic	8.6	62.5	14.0	5.4	5.1	4.5
Total	37.6	38.6	11.2	3.6	4.0	5.0

Note: Totals for each region add up to 100.0 percent

\*Those proportions contained within one box are not statistically significant at P<.05. Proportions contained in any one box are statistically significant at P<.05 from the proportions contained in any other box

**Table 4. Percentage of Family Practice Residency Graduates by Region Having Hospital Practice Privileges to Perform Cesarean Sections, 1979**

	Privileges to Perform Cesarean Sections*	No Privileges in Performing Cesarean Sections				
		No Interest	Lack of Training	Privileges Denied	Liability Costs Prohibitive	No Hospital or Not Reported
West South Central	31.5	33.3	19.4	3.2	6.9	5.5
West North Central	25.1	31.0	34.0	3.6	2.5	3.8
Mountain	24.6	37.1	23.0	5.2	4.4	5.6
Pacific	23.2	40.8	19.6	6.7	5.9	3.8
East South Central	11.4	55.3	21.1	5.7	2.4	4.1
East North Central	5.4	47.8	36.7	2.2	4.3	3.6
New England	5.1	50.0	35.3	1.5	2.9	5.2
South Atlantic	2.8	61.7	22.0	3.5	2.9	7.1
Middle Atlantic	1.5	63.1	24.4	3.3	3.3	4.5
Total	13.9	46.9	26.5	3.9	4.1	4.7

Note: Totals for each region add up to 100.0 percent

\*Those proportions contained within one box are not statistically significant at P<.05. Proportions contained in any one box are statistically significant at P<.05 from the proportions contained in any other box

for not performing cesarean sections was lack of interest (46.9 percent), followed by lack of training (26.5 percent), prohibitive liability costs (4.1 percent), and privileges denied (3.9 percent).

In each census region the majority of respondents indicated that they did not have privileges to perform cesarean sections. Major reasons given in each region for not having this hospital privilege

were lack of interest and lack of training. Approximately 31.5 percent of the respondents in the West South Central states reported privileges to perform cesarean sections, as did 25.1 percent of the respondents in the West North Central states and 24.6 percent in the Mountain states. At the other end of the spectrum, only 1.5 percent of the respondents practicing in the Middle Atlantic



**Table 5. Percentage of Family Practice Residency Graduates by Region Having Hospital Practice Privileges in Surgery First Assist, 1979**

	Privileges in Surgery First Assist*	No Privileges in Surgery First Assist				
		No Interest	Lack of Training	Privileges Denied	Liability Costs Prohibitive	No Hospital or Not Reported
West North Central	88.6	8.4	0.0	1.0	0.3	1.8
Mountain	84.7	8.9	2.0	0.0	0.0	4.4
Pacific	81.5	13.5	0.4	1.1	0.6	2.9
West South Central	75.5	17.6	1.4	0.5	1.9	3.3
East North Central	71.7	23.0	1.3	0.2	1.9	1.9
East South Central	54.5	39.8	2.4	0.8	0.0	2.4
New England	47.8	38.2	3.7	3.7	2.2	4.4
South Atlantic	27.3	59.1	5.7	1.2	1.6	5.1
Middle Atlantic	22.3	63.1	4.2	1.8	4.2	4.5
Total	62.2	29.8	2.3	1.0	1.4	3.3

Note: Totals for each region add up to 100.0 percent  
 \*Those proportions contained within one box are not statistically significant at  $P < .05$ . Proportions contained in any one box are statistically significant at  $P < .05$  from the proportions contained in any other box

**Table 6. Percentage of Family Practice Residency Graduates by Region Having Hospital Practice Privileges in Minor Surgery, 1979**

	Privileges in Minor Surgery*	No Privileges in Minor Surgery				
		No Interest	Lack of Training	Privileges Denied	Liability Costs Prohibitive	No Hospital or Not Reported
West North Central	69.5	17.5	7.9	1.3	1.3	2.5
Mountain	59.3	23.0	10.5	0.8	2.4	4.0
West South Central	57.4	25.9	9.7	1.4	1.9	3.7
Pacific	55.6	26.9	9.3	2.3	2.9	3.0
East North Central	40.8	41.4	10.1	2.1	2.6	3.0
East South Central	31.7	51.2	9.8	4.1	2.4	0.8
South Atlantic	15.1	61.7	12.2	2.6	2.8	5.7
New England	10.3	58.1	23.5	2.2	1.5	4.4
Middle Atlantic	7.4	63.1	15.8	3.9	5.1	4.8
Total	40.1	40.1	11.3	2.2	2.6	3.7

Note: Totals for each region add up to 100.0 percent  
 \*Those proportions contained within one box are not statistically significant at  $P < .05$ . Proportions contained in any one box are statistically significant at  $P < .05$  from the proportions contained in any other box

states and 2.8 percent of the respondents in the South Atlantic states performed cesarean sections.

### Surgery

The majority of all respondents in all regions (62.2 percent) indicated they have privileges to first assist in surgery (Table 5). The major reason

listed by respondents for not having surgery first assist privileges was lack of interest (29.8 percent). Lack of training, prohibitive liability costs, and privileges denied were mentioned by very few respondents. The majority of respondents in six regions had surgery first assist privileges, with percentages ranging from 88.6 percent of respondents in the West North Central region to 54.5 percent in the East South Central region. In the New



**Table 7. Percentage of Family Practice Residency Graduates by Region Having Hospital Practice Privileges in Major Surgery, 1979**

	Privileges in Major Surgery*	No Privileges in Major Surgery				
		No Interest	Lack of Training	Privileges Denied	Liability Costs Prohibitive	No Hospital or Not Reported
West South Central	17.1	45.8	24.1	1.9	6.0	5.1
West North Central	15.5	44.7	31.7	2.5	1.8	3.8
Mountain	13.7	48.8	26.2	2.0	2.8	6.4
Pacific	12.6	46.7	27.2	3.8	4.8	5.0
East South Central	4.9	61.0	26.8	1.6	3.3	2.4
East North Central	2.2	59.7	28.7	3.0	3.0	3.4
South Atlantic	1.2	68.6	19.6	1.8	2.4	6.5
Middle Atlantic	0.9	65.8	23.8	2.7	2.1	4.8
New England	0.0	65.4	27.2	0.7	2.2	4.4
Total	7.4	56.1	26.1	2.5	3.1	4.7

Note: Totals for each region add up to 100.0 percent  
 \*Those proportions contained within one box are not statistically significant at  $P < .05$ . Proportions contained in any one box are statistically significant at  $P < .05$  from the proportions contained in any other box

England states 47.8 percent of the respondents had surgery first assist privileges. Approximately one in four respondents in the South Atlantic states (27.3 percent) and Middle Atlantic states (22.3 percent) had surgery first assist privileges.

Equal percentages of respondents in the United States indicated they did have privileges in minor surgery as indicated they did not have the privilege due to lack of interest (40.1 percent) (Table 6). Regional differences were quite significant. While seven in ten respondents (69.5 percent) in the West North Central states indicated they have privileges in minor surgery, less than one in ten respondents (7.4 percent) in the Middle Atlantic states had such privileges. Lack of interest followed by lack of training were the major reasons respondents in each region did not have privileges in minor surgery.

Less than one in ten respondents (7.4 percent) in the United States had privileges in major surgery (Table 7). Lack of interest followed by lack of training were the major reasons respondents did not have practice privileges in major surgery. Regional differences in major surgery privileges were not that striking. At least one in ten respondents in the West South Central (17.1 percent), West North Central (15.5 percent), Mountain (13.7 percent), and Pacific (12.6 percent) regions had privileges in

major surgery. In general, respondents in the South Atlantic, Middle Atlantic, and New England states did not have major surgery privileges (only 1.2 percent, 0.9 percent, and 0.0 percent, respectively, had such privileges).

### SMSA vs non-SMSA

Comparisons of the data by metropolitan vs nonmetropolitan areas revealed that respondents practicing in nonmetropolitan areas in the United States have more extensive hospital practice privileges than do physicians practicing in a metropolitan area (Table 8). Not only was this true for the total of all regions, but in general held true within each census region.

A higher percentage of respondents indicated they maintained privileges in the nonmetropolitan areas of four regions than the respondents in any other region whether metropolitan or nonmetropolitan. More than eight in ten respondents in the nonmetropolitan areas of the West North Central (96.8 percent), Mountain (91.4 percent), West South Central (88.0 percent), and Pacific (83.8 percent) regions have privileges in routine obstetric care. Approximately seven in ten respondents in the nonmetropolitan areas of these same regions have privileges in complicated obstetric care



**Table 8. Percentage of Family Practice Residency Graduates in SMSAs/non-SMSAs by Region Having Various Hospital Practice Privileges, 1979**

	Routine Obstetric Care	Complicated Obstetric Care	Cesarean Sections	Surgery First Assist	Minor Surgery	Major Surgery
New England**						
SMSA	38.9	9.3	3.7	37.0	3.7	0.0
non-SMSA	61.0*	28.0*	6.1	54.9*	14.6*	0.0
Middle Atlantic						
SMSA	29.5	5.7	0.4	15.5	6.4	0.0
non-SMSA	49.3*	20.3*	5.8*	49.3*	11.6	4.3*
East North Central						
SMSA	75.2	28.7	2.4	61.2	35.8	0.9
non-SMSA	86.1*	67.1*	12.1*	91.9*	49.5*	5.2*
West North Central						
SMSA	88.9	51.9	6.8	81.5	63.0	4.3
non-SMSA	96.8*	84.9*	36.5*	94.1*	74.0*	21.9*
South Atlantic						
SMSA	26.4	10.2	2.2	23.2	13.4	1.0
non-SMSA	45.9*	24.3*	3.3	32.6*	17.7	1.1
East South Central						
SMSA	55.7	18.0	3.3	42.6	21.3	1.6
non-SMSA	65.0	50.0	20.0*	68.3*	43.3*	8.3
West South Central						
SMSA	61.8	38.2	19.1	65.6	48.1	12.2
non-SMSA	88.0*	70.7*	57.3*	93.3*	76.0*	28.0*
Mountain						
SMSA	66.7	33.3	9.6	78.1	42.1	4.4
non-SMSA	91.4*	70.3*	39.1*	89.8*	74.2*	22.7*
Pacific						
SMSA	66.8	34.8	16.2	77.3	50.7	8.8
non-SMSA	83.8*	64.1*	41.5*	93.0*	70.4*	23.2*
Total						
SMSA	56.3	25.4	7.0	53.0	32.9	3.7
non-SMSA	77.0*	57.3*	24.8*	76.3*	51.2*	13.3*

\*Differences are statistically significant at  $P < .05$

\*\*Care should be used in comparing SMSA vs non-SMSA in the New England region, since SMSAs are defined using the town as the primary unit rather than the county

(West North Central, 84.9 percent; West South Central, 70.7 percent; Mountain, 70.3 percent; and Pacific, 64.1 percent). Approximately four in ten respondents in the nonmetropolitan areas of these same regions have privileges to perform cesarean sections.

Approximately nine in ten respondents in the nonmetropolitan areas of these same four regions had privileges in surgery first assist (West North Central, 94.1 percent; West South Central, 93.3 percent; Pacific, 93.0 percent; and Mountain, 89.8 percent), seven in ten had privileges in minor surgery (West South Central, 76.0 percent; Mountain, 74.2 percent; West North Central, 74.0 percent; and Pacific, 70.4 percent), and two in ten had privileges in major surgery (West South Central,

28.0 percent; Pacific, 23.2 percent; Mountain, 22.7 percent; and West North Central, 21.9 percent).

### Comment

Several limitations to the data must be acknowledged. Two categories may have caused some confusion: complicated obstetric care and minor surgery. The broad term "complicated obstetric care" by design encompassed both high risk patients and complicated delivery. Those respondents with privileges in one but not the other may have inadequately reported their privileges. Moreover, only two examples were provided for



minor surgery: hernia, and dilatation and curettage. Herniorrhaphy may or may not be considered minor surgery, depending upon the complexity of the operation. Using "hernia" as an example for minor surgery may have misled some respondents. In either case, however, most respondents wrote in their exact privileges when there was some point of confusion. There should be no problem in comparing these two privileges across census regions, as errors in interpretation could be assumed to average out across the country.

Response rates were high enough to assure highly accurate results for the target population. Because the study was limited, however, to the family practice residency graduates from 1970 through 1978 who were diplomates of the American Board of Family Practice, there is some question as to the representation of all graduates by only those who are board certified. This could be considered a flaw in the study.

An interesting factor that results from a review of these data relates to the percentage of individuals who do not have various privileges because they are "not interested." If one assumes that the graduates' practices would be similar to the broadly based curriculum in the training programs, these "not interested" responses provoke a number of questions.

Do some graduates come to the residency already disinterested in certain aspects of patient care, or does their interest wane as a result of minimum exposure or emphasis during the residency? Do pressures from medical school faculty cause students to be satisfied with residency program curricula that lessen the opportunity for future hospital privileges? Are external pressures resulting in family practice residency curricula that do not emphasize skills necessary for hospital practice? Do pressures in the practice community influence their decision not to apply for privileges regardless of their training experiences?

Although the structure of the questions in this analysis does not afford an opportunity to assess these areas, these questions certainly should be considered when reviewing the data.

## Conclusions

A higher percentage of respondents in the West North Central census region had privileges in ob-

stetrics at whatever level than did the respondents in any other regions. A very low percentage in the South Atlantic states or Middle Atlantic states had privileges in obstetrics compared with other regions. In general, those west of the Mississippi River were more likely to have privileges in obstetrics than were those east of the Mississippi.

A higher percentage of respondents in the West North Central, Mountain, and West South Central census regions had privileges in surgery at whatever level than had the respondents in any other regions. A very low percentage of respondents in the New England, Middle Atlantic, and South Atlantic census regions had surgical privileges as compared with those in other regions. In general, respondents west of the Mississippi River were more likely to have surgical privileges than those east of the Mississippi.

Respondents in nonmetropolitan areas were more likely to have hospital privileges in obstetrics or surgery than were respondents in metropolitan areas. This was particularly true of the nonmetropolitan areas of census regions west of the Mississippi River.

## Acknowledgement

Christopher Robinson provided assistance in statistical analysis.

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