

# Hospital Privileges for Family Physicians: A National Study of Office Based Members of the American Academy of Family Physicians

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In 1980 the American Academy of Family Physicians sampled those active members who were nonfederal, office based physicians in direct patient care to ascertain the characteristics of their hospital practices. The sample was stratified by the nine US census regions; 83.7 percent of the 5,216 active members in the sample responded.

The vast majority of family physician/general practitioners in direct patient care in an office based setting have hospital admission privileges in one or more hospitals. A higher percentage of family physician/general practitioners in census regions west of the Mississippi River were likely to have privileges in obstetrics and surgery than those in eastern regions. Moreover, family physician/general practitioners in the non-metropolitan areas of each census region were more likely to have hospital privileges at any level than were their colleagues in the metropolitan areas of the same region. Although there were disparities in the proportions of family physician/general practitioners with certain hospital privileges among regions, the vast majority in each region indicated that the privileges afforded them were appropriate.

The past decade has brought many changes in medical education and health care delivery in the United States which have had an impact on the role of the family physician. With the advent of the specialty of family practice, major changes were made in graduate training programs for family physicians. During the same period these programs were growing, undergraduate medical edu-

cation and graduate training of other physician specialties were reassessed and training programs were developed to produce new types of health care personnel, including physicians' assistants and nurse practitioners. The maldistribution of medical manpower by geographic location and specialty resulted in studies of the need and demand for various types of medical manpower.<sup>1,2</sup> The use of hospital facilities for providing ambulatory care increased, as did third party payment for medical services, and new health care delivery systems were established.

Of particular concern to family physicians is

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how these changes may affect their opportunity to provide inpatient hospital care for their patients. Little has been published concerning the hospital practice of family physicians.<sup>3</sup> The few studies conducted in the past decade to assess hospital privileges of and/or hospital inpatient care by general practitioners and family physicians have been limited in scope to a single group,<sup>4</sup> a state,<sup>5</sup> a region,<sup>6</sup> or at most a comparative study of two regions.<sup>7</sup> The latter three studies obtained data from hospital administrators that would tend to reflect hospital bylaws rather than actual hospital practice of the physicians.

Family physicians' satisfaction with hospital privileges was measured in two national studies in the late 1960s and early 1970s. The first of these was performed in 1969 by the American Academy of General Practice. Of the 19,257 academy member respondents, 96 percent reported they were satisfied with their privileges; 4 percent reported they were "unduly restricted."<sup>8</sup> The second was a 1970 to 1973 study of a national sample of office based general practitioners and pediatricians in group, nongroup, and prepaid group practices. Of the 827 general practitioner respondents, those who reported "not satisfied" with their hospital privileges represented 6 percent, 7 percent, and 14 percent, respectively, by practice setting.<sup>9</sup>

Believing there was a need to assess the current role of family physicians in hospital care in the United States, the American Academy of Family Physicians (AAFP) in 1979 instituted a series of national studies for that purpose. The first of these, a study of family practice residency graduates from 1970 to 1978 who were diplomates of the American Board of Family Practice revealed that less than 1 percent of the 3,021 respondents in active office based practice had been denied admission privileges and less than 4 percent had been denied requested privileges for inpatient care.<sup>10</sup> A more detailed analysis of hospital practice data from the study is scheduled for publication.

The second study of the series, conducted during the summer and fall of 1980 to determine the hospital practice of active office based members of the American Academy of Family Physicians, is the subject of this report. Data presented were collected from a national sample stratified by US census regions on admission privileges, practice privileges, reasons for lack of privileges, and degree of satisfaction with privileges.

## Methods

The 19,780 members of the American Academy of Family Physicians in the active membership classification identified in October 1978 as nonfederal, office based physicians in direct patient care were the target population for a profile of the hospital practice conducted in the summer of 1980. Those Academy members represented 43.6 percent of the total nonfederal office based family physician/general practitioners in the United States.<sup>11</sup> Because of the time span between October 1978 and the summer of 1980, it was discovered that only 18,681 were still active members. Those deleted included physicians no longer active AAFP members due to death, retirement, change in membership classification, failure to complete continuing medical education requirements, and nonpayment of dues. It was also noted that active members enrolled between October 1978 and the summer of 1980 were not sampled.

In July 1980 a four-page questionnaire was sent to a sample of 5,216 active members who had indicated in October 1978 that they were in direct patient care in an office based setting. This sample was stratified by census region of current practice (Figure 1); each census region was sampled at a different rate in order to obtain sufficient data for each region to make the estimates meaningful. Following a second mailing in September 1980, an overall response rate of 83.7 percent was achieved; a similar response rate was achieved in each census region. To compensate for non-response in each census region, all estimates were adjusted not only by the appropriate stratum sampling fraction but also by the response percentage for each stratum.

Because not all family physicians/general practitioners belong to the American Academy of Family Physicians, the estimated number of physicians with a certain characteristic in a particular region is not provided. Differences between proportions were compared by a standardized normal Z using a significance level set at  $P < .05$ .<sup>12</sup>

## Results

### *Admission Privileges*

In this 1980 AAFP study 95.6 percent of the members in direct patient care in an office based

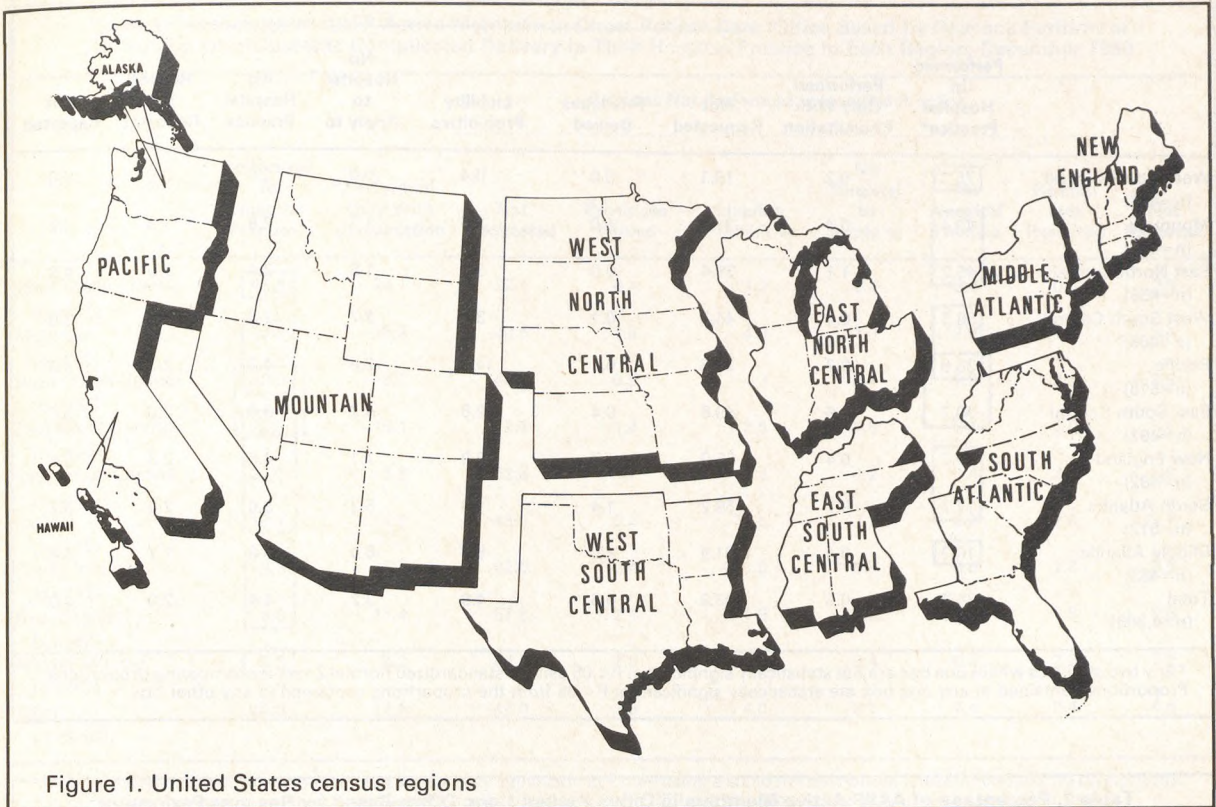


Figure 1. United States census regions

setting were estimated to have hospital admission privileges at one or more hospitals; 4.4 percent were estimated to have no hospital admission privileges. In comparing regions of the country, less than 5 percent of the family physician/general practitioners in each region lacked hospital admission privileges, except for the Middle Atlantic states and the South Atlantic states, where 6.6 percent and 9.0 percent, respectively, were estimated to have no hospital admission privileges.

Members' current satisfaction with hospital admission privileges appears to be almost identical with that reported in 1969.<sup>8</sup> In 1980 approximately 95.4 percent of the AAFP members with hospital admission privileges reported they were satisfied with their privileges, 3.2 percent reported they were unduly restricted, and 1.4 percent did not respond to the question.

Hospital admission privileges are not the sole measurement of the scope of activities included in the hospital practice of a physician. Hospital practice privileges, or lack of them, reflect more

accurately the depth and breadth of a physician's hospital practice. Therefore, it is important to determine what hospital privileges are afforded and the reasons given for lack of privileges. Reasons for lack of privileges examined in this study are lack of interest, denial of privileges, prohibitive liability costs, excessive distance to the nearest hospital, or no inpatient hospital care as part of the practice.

#### *Obstetric Care: Regional Comparisons*

One of every three family physician/general practitioners (36.7 percent) in the United States was estimated to perform routine obstetric care in his or her hospital practice (Table 1). The major reason for the physicians excluding routine obstetric care from their practices was that this privilege was not requested (43.9 percent). Less than 5 percent reported that this privilege was denied or that it was not requested because of prohibitive liability costs, excessive distance to the nearest

**Table 1. Percentage of AAFP Active Members in Direct Patient Care, Office Based by Reasons Perform or Do Not Perform Obstetric Routine Care in Their Hospital Practice in Each Region, December 1980**

	Reasons Not Performed in Hospital Practice								
	Performed in Hospital Practice*	Performed Only With Consultation	Not Requested	Privileges Denied	Liability Prohibitive	No Hospital to Apply to	No Hospital Practice	Reason Not Reported	Not Reported
West North Central (n=497)	75.3	0.2	19.1	0.0	0.4	0.0	2.4	0.6	2.0
Mountain (n=465)	49.4	0.4	37.0	1.0	3.6	1.3	2.8	1.3	3.2
East North Central (n=450)	45.2	1.1	39.4	0.0	3.2	1.8	2.4	2.0	4.9
West South Central (n=465)	38.3	0.4	44.3	0.1	3.9	3.7	2.8	3.4	3.0
Pacific (n=515)	35.6	0.2	37.8	0.2	14.1	2.4	4.2	2.2	3.3
East South Central (n=497)	30.7	0.6	49.8	0.4	2.8	4.2	3.4	2.6	5.5
New England (n=482)	19.7	0.4	55.0	1.7	2.9	7.1	4.6	2.3	6.4
South Atlantic (n=512)	17.7	0.7	59.2	1.4	1.8	5.2	9.0	2.0	3.2
Middle Atlantic (n=483)	10.3	0.4	61.5	1.2	5.9	6.0	6.6	1.7	6.4
Total (n=4,366)	36.7	0.5	43.9	0.5	4.8	3.2	4.4	2.0	4.0

\*Any two statistics within one box are not statistically significant at P<.05 using a standardized normal Z test for comparing proportions. Proportions contained in any one box are statistically significant at P<.05 from the proportions contained in any other box

**Table 2. Percentage of AAFP Active Members in Direct Patient Care, Office Based by Reasons Perform or Do Not Perform Obstetric High Risk in Their Hospital Practice in Each Region, December 1980**

	Reasons Not Performed in Hospital Practice								
	Performed in Hospital Practice*	Performed Only With Consultation	Not Requested	Privileges Denied	Liability Prohibitive	No Hospital to Apply to	No Hospital Practice	Reason Not Reported	Not Reported
West North Central (n=497)	32.9	24.5	29.5	0.4	1.8	2.0	2.4	2.8	3.6
Mountain (n=465)	21.5	17.2	44.1	2.1	4.3	2.3	2.8	2.6	3.2
West South Central (n=465)	21.2	9.6	48.8	0.6	4.3	4.7	2.8	3.9	4.1
East North Central (n=450)	17.9	16.6	45.0	1.1	3.2	2.7	2.4	4.7	6.3
East South Central (n=497)	14.8	7.5	55.0	1.6	2.4	6.0	3.4	3.0	6.3
Pacific (n=515)	10.5	14.8	49.5	0.8	10.8	2.6	4.2	2.4	4.5
South Atlantic (n=512)	8.1	5.1	63.0	1.8	1.4	5.6	9.0	2.6	3.5
New England (n=482)	4.8	9.5	59.5	2.3	1.5	7.5	4.6	2.9	7.5
Middle Atlantic (n=483)	2.6	4.2	65.5	2.1	3.8	5.8	6.6	2.3	7.2
Total (n=4,366)	15.1	12.6	50.5	1.3	4.1	4.0	4.4	3.1	5.0

\*Any two statistics within one box are not statistically significant at P<.05 using a standardized normal Z test for comparing proportions. Proportions contained in any one box are statistically significant at P<.05 from the proportions contained in any other box

**Table 3. Percentage of AAFP Active Members in Direct Patient Care, Office Based by Reasons Perform or Do Not Perform Obstetric Complicated Delivery in Their Hospital Practice in Each Region, December 1980**

	Reasons Not Performed in Hospital Practice								
	Performed in Hospital Practice*	Performed Only With Consultation	Not Requested	Privileges Denied	Liability Prohibitive	No Hospital to Apply to	No Hospital Practice	Reason Not Reported	Not Reported
West North Central (n=497)	45.8	24.1	22.1	0.4	1.2	0.4	2.4	0.8	2.8
Mountain (n=465)	29.5	16.2	39.9	1.4	4.0	1.3	2.8	1.5	3.4
West South Central (n=465)	28.0	8.1	45.2	0.9	4.3	3.4	2.8	3.4	3.9
East North Central (n=450)	22.8	18.1	42.6	1.4	2.5	1.8	2.4	2.9	5.6
East South Central (n=497)	21.7	5.8	52.6	1.2	2.4	4.2	3.4	2.8	5.9
Pacific (n=515)	18.1	14.3	43.8	0.4	11.0	2.2	4.2	2.4	3.7
South Atlantic (n=512)	9.3	5.1	62.0	2.4	1.0	5.0	9.0	2.8	3.5
New England (n=482)	6.0	11.4	57.5	2.1	1.9	7.5	4.6	2.3	6.8
Middle Atlantic (n=483)	2.5	5.3	64.0	1.9	4.4	5.8	6.6	2.3	7.2
Total (n=4,366)	20.6	12.6	47.0	1.3	4.0	3.1	4.4	2.4	4.6

\*Any two statistics within one box are not statistically significant at  $P < .05$  using a standardized normal Z test for comparing proportions. Proportions contained in any one box are statistically significant at  $P < .05$  from the proportions contained in any other box

hospital, or no hospital practice. Regional comparisons illustrate sharp differences. Three in four (75.3 percent) in the West North Central region included routine obstetric care in their practices. While almost one in two in the Mountain (49.4 percent) and East North Central (45.2 percent) census regions included routine obstetric care in his hospital practice, only one in ten in the Middle Atlantic (10.3 percent) included it. Although the plurality of family physician/general practitioners excluding obstetric routine care in each region report their reason for excluding it as "not requested," one region is of particular interest—approximately 14.1 percent in the Pacific region excluded routine obstetric care because of excessive liability costs.

Routine obstetric care was distinguished from high risk care in order to identify the care provided to pregnant patients with preexisting physical problems prior to admission, such as hypertension, diabetes, heart disease, and preeclampsia. Approximately 15.1 percent of the family physi-

cian/general practitioner population provided obstetric care to their patients in such a high risk classification while an additional 12.6 percent provided it only with consultation (Table 2). The majority (50.5 percent) had not requested the privilege. There are significant differences in each region in the proportions of family physician/general practitioners who provide obstetric high risk care to their patients. While almost one in three (32.9 percent) in the West North Central region provided such care to patients, family physicians in the Middle Atlantic region generally did not provide obstetric care to patients at high risk—only 2.6 percent actually had such privileges. It is again noteworthy that one in ten in the Pacific (10.8 percent) did not provide this care to patients because of the prohibitive cost of liability insurance.

Approximately one in five family physician/general practitioners (20.6 percent) in all regions combined performed complicated obstetric deliveries in his hospital practice (Table 3). Approximately 12.6 percent included complicated obstetric deliv-

**Table 4. Percentage of AAFP Active Members in Direct Patient Care, Office Based by Reasons Perform or Do Not Perform Cesarean Sections in Their Hospital Practice in Each Region, December 1980**

	Reasons Not Performed in Hospital Practice								
	Performed in Hospital Practice*	Performed Only With Consultation	Not Requested	Privileges Denied	Liability Prohibitive	No Hospital to Apply to	No Hospital Practice	Reason Not Reported	Not Reported
West North Central (n=497)	26.5	12.3	44.7	4.2	2.2	0.1	2.4	4.2	3.4
West South Central (n=465)	25.0	5.8	49.9	1.5	4.2	3.4	2.8	3.9	3.4
Mountain (n=465)	21.7	4.5	51.8	5.9	5.0	1.3	2.8	3.4	3.6
Pacific (n=515)	15.8	4.3	54.9	1.6	9.6	2.2	4.2	3.5	3.9
East South Central (n=497)	13.3	5.6	58.6	3.8	2.0	3.8	3.4	3.6	5.9
East North Central (n=450)	10.5	7.9	58.3	2.3	4.1	1.8	2.4	6.8	6.0
South Atlantic (n=512)	5.1	1.4	69.1	3.5	1.0	3.8	9.0	3.4	3.7
New England (n=482)	1.5	2.3	68.3	3.3	1.9	6.6	4.6	3.5	8.1
Middle Atlantic (n=483)	0.2	1.2	69.7	3.9	3.4	5.4	6.6	2.7	6.8
Total (n=4,366)	13.2	5.3	58.3	3.0	4.1	2.8	4.4	4.1	4.8

\*Any two statistics within one box are not statistically significant at P<.05 using a standardized normal Z test for comparing proportions. Proportions contained in any one box are statistically significant at P<.05 from the proportions contained in any other box

eries, but only with consultation. Almost one in two (47.0 percent) excluded complicated obstetric deliveries from his practice because he did not request it. Less than 5 percent for each reason excluded complicated obstetric deliveries because of prohibitive liability costs, denial of privileges, or excessive distance to a hospital. Regional differences are again significant. Approximately 45.8 percent of the family physician/general practitioners in the West North Central region included complicated obstetric deliveries in their hospital practices, with another 24.1 percent estimated to include it only with consultation. Less than one in ten in the South Atlantic (9.3 percent), New England (6.0 percent), and Middle Atlantic (2.5 percent) regions included it in his hospital practice. The Pacific region is again worthy of note, with one in ten (11.0 percent) not performing compli-

cated deliveries due to the high cost of liability insurance.

Approximately 13.2 percent of the family physician/general practitioners in the United States performed cesarean sections in hospital practice, and approximately 5.3 percent performed them only with consultation (Table 4). The majority (58.3 percent) had not requested the privilege; less than 5 percent in each case indicated denial of privileges, prohibitive cost of liability insurance, or excessive distance to a hospital as reasons for not performing cesarean sections. Again the proportions for each census region are significantly different. While at least one in five respondents in the West North Central (26.5 percent), West South Central (25.0 percent), and Mountain (21.7 percent) regions included cesareans in hospital practice, family physician/general practitioners in the

**Table 5. Percentage of AAFP Active Members in Direct Patient Care, Office Based by Reasons Perform or Do Not Perform Surgery Assisting in Their Hospital Practice in Each Region, December 1980**

	Reasons Not Performed in Hospital Practice								
	Performed in Hospital Practice*	Performed Only With Consultation	Not Requested	Privileges Denied	Liability Prohibitive	No Hospital to Apply to	No Hospital Practice	Reason Not Reported	Not Reported
Pacific (n=515)	82.4	2.0	7.5	0.2	2.4	0.0	4.2	0.4	1.0
Mountain (n=465)	78.9	1.5	12.1	0.2	1.5	0.4	2.8	0.9	1.7
West North Central (n=497)	78.3	3.8	11.9	0.4	1.2	0.1	2.4	0.2	1.8
West South Central (n=465)	69.7	2.4	18.2	0.2	3.1	0.2	2.8	1.3	2.1
East North Central (n=450)	60.1	1.6	25.0	0.5	4.5	0.0	2.4	2.3	3.7
East South Central (n=497)	47.4	4.2	33.8	1.4	3.2	0.4	3.4	1.6	4.6
New England (n=482)	38.8	1.9	40.0	2.9	4.4	0.4	4.6	1.5	5.6
South Atlantic (n=512)	21.0	1.3	58.0	1.7	2.7	0.0	9.0	3.0	3.3
Middle Atlantic (n=483)	18.3	0.0	56.6	4.2	6.9	0.2	6.6	1.5	5.8
Total (n=4,366)	55.5	1.9	29.0	1.2	3.4	0.1	4.4	1.5	3.1

\*Any two statistics within one box are not statistically significant at  $P < .05$  using a standardized normal Z test for comparing proportions. Proportions contained in any one box are statistically significant at  $P < .05$  from the proportions contained in any other box

New England and Middle Atlantic regions rarely included them. Approximately one in ten (9.6 percent) in the Pacific region excluded cesareans from hospital practice because of the excessive cost of liability insurance.

### *Surgery: Regional Comparisons*

The majority of all family physician/general practitioners (55.5 percent) had privileges to first assist in surgery (Table 5). The major reason listed for not having this privilege was that they did not request it (29.0 percent). Denial of privileges, prohibitive liability costs, excessive distance to a hospital, or no hospital practice was mentioned by a very small percentage of physicians. The majority of family physician/general practitioners in five regions had surgery first assist privileges, with

percentages ranging from 82.4 percent in the Pacific to 60.1 percent in the East North Central regions. Approximately one in five respondents in the South Atlantic (21.0 percent) and Middle Atlantic (18.3 percent) regions had surgery first assist privileges.

Approximately one in three family physician/general practitioners in all regions (32.5 percent) had privileges in intermediate surgery (Table 6). The major reason for excluding intermediate surgery from hospital practice was that the privilege was not requested (44.3 percent). Less than 5 percent indicated denial of privilege, prohibitive cost of liability insurance, or excessive distance to a hospital. There were significant differences in comparing by region the proportion of family physician/general practitioners who had privileges in intermediate surgery. The majority had intermediate surgery privileges in the West North Cen-

**Table 6. Percentage of AAFP Active Members in Direct Patient Care, Office Based by Reasons Perform or Do Not Perform Intermediate Surgery in Their Hospital Practice in Each Region, December 1980**

	Reasons Not Performed in Hospital Practice								
	Performed in Hospital Practice*	Performed Only With Consultation	Not Requested	Privileges Denied	Liability Prohibitive	No Hospital to Apply to	No Hospital Practice	Reason Not Reported	Not Reported
West North Central (n=497)	53.0	5.0	29.0	2.0	2.6	0.1	2.4	2.6	3.2
West South Central (n=465)	51.4	3.7	29.6	0.6	5.4	0.2	2.8	2.8	3.4
Mountain (n=465)	47.5	2.8	35.2	2.1	3.8	0.4	2.8	1.7	3.6
Pacific (n=515)	44.4	5.2	30.4	1.4	9.1	0.0	4.2	2.4	2.9
East North Central (n=450)	32.2	4.1	41.5	1.8	5.4	0.0	2.4	6.3	6.4
East South Central (n=497)	29.2	3.6	48.2	3.4	3.4	0.6	3.4	3.0	5.2
New England (n=482)	17.4	1.7	56.6	3.9	2.7	0.2	4.6	3.3	9.5
South Atlantic (n=512)	11.3	0.8	65.9	3.7	1.7	0.0	9.0	3.7	3.9
Middle Atlantic (n=483)	6.2	0.2	66.4	5.2	4.8	0.2	6.6	2.9	7.4
Total (n=4,366)	32.5	3.2	44.3	2.5	4.7	0.1	4.4	3.5	4.8

\*Any two statistics within one box are not statistically significant at P<.05 using a standardized normal Z test for comparing proportions. Proportions contained in any one box are statistically significant at P<.05 from the proportions contained in any other box

**Table 7. Percentage of AAFP Active Members in Direct Patient Care, Office Based by Reasons Perform or Do Not Perform Major Surgery in Their Hospital practice in Each Region, December 1980**

	Reasons Not Performed in Hospital Practice								
	Performed in Hospital Practice*	Performed Only With Consultation	Not Requested	Privileges Denied	Liability Prohibitive	No Hospital to Apply to	No Hospital Practice	Reason Not Reported	Not Reported
West South Central (n=465)	31.3	5.3	42.3	1.9	7.1	0.2	2.8	5.4	3.7
Mountain (n=465)	25.7	3.4	49.6	3.6	6.5	0.6	2.8	3.4	4.3
West North Central (n=497)	21.1	6.4	53.5	4.4	3.0	0.3	2.4	5.0	3.8
Pacific (n=515)	17.2	5.1	52.5	2.6	9.4	0.0	4.2	4.3	4.7
East South Central (n=497)	14.4	3.0	60.6	4.6	3.2	0.8	3.4	3.8	6.2
East North Central (n=450)	11.2	3.7	58.5	3.8	5.9	0.0	2.4	7.2	7.3
South Atlantic (n=512)	6.2	1.0	69.3	4.4	1.7	0.2	9.0	4.8	3.5
New England (n=482)	3.1	1.0	68.3	5.6	3.1	0.2	4.6	4.8	9.3
Middle Atlantic (n=483)	1.5	0.0	71.7	5.4	4.2	0.2	6.6	3.0	7.4
Total (n=4,366)	14.2	3.4	58.5	3.9	5.2	0.2	4.4	4.9	5.4

\*Any two statistics within one box are not statistically significant at P<.05 using a standardized normal Z test for comparing proportions. Proportions contained in any one box are statistically significant at P<.05 from the proportions contained in any other box



tral (53.0 percent) and West South Central (51.4 percent) regions. Less than one in ten (6.2 percent) in the Middle Atlantic region had intermediate surgery privileges.

Approximately one in ten family physician/general practitioners (14.2 percent) in the United States had privileges in major surgery (Table 7). The majority (58.5 percent) had no privileges in major surgery because they did not request them. Comparisons by region were significant. Approximately three in ten in the West South Central (31.3 percent) and Mountain (25.7 percent) regions had privileges in major surgery. In general, family physician/general practitioners in the New England and Middle Atlantic regions did not perform major surgery.

### *SMSA/Non-SMSA Comparisons*

Within each census region, comparisons are made among physicians practicing in a Standard Metropolitan Statistical Area (SMSA)\* and physicians practicing in a non-SMSA. Although the dichotomy between SMSA and non-SMSA cannot be equated to urban and rural, the distinction does provide some insights into how family physician/general practitioners are practicing within these settings.

Comparisons of the proportions of family physician/general practitioners in metropolitan or nonmetropolitan areas of the United States reveal that those in nonmetropolitan areas are more likely to have hospital privileges at any level than are their colleagues in metropolitan areas. This generalization is applicable also to the majority of census regions (Table 8). The exceptions are in the Mountain and Pacific regions, where equally large percentages of family physician/general practitioners in the metropolitan and nonmetropolitan areas have privileges to assist in surgery. Other exceptions include the Middle Atlantic, where

equally small percentages of family physician/general practitioners in the metropolitan and nonmetropolitan areas have privileges to perform routine obstetric care, cesarean sections, intermediate surgery, and major surgery, and New England, where equally small percentages in SMSA or non-SMSA areas have privileges in intermediate and major surgery and in performing cesarean sections.

It is interesting to note that a significantly higher proportion of family physician/general practitioners in the metropolitan areas of the West North Central region have privileges in routine obstetric care, complicated delivery, and obstetric patients at high risk than in the metropolitan areas of any other census regions. The same is true concerning the proportion of physicians with these privileges in the nonmetropolitan areas of the West North Central region compared to the nonmetropolitan areas of the other census regions.

It is also clear that for those regions west of the Mississippi River, the Pacific, Mountain, West North Central and West South Central, a higher proportion of family physician/general practitioners in the metropolitan and nonmetropolitan areas have privileges in surgery assisting, intermediate surgery, and major surgery than in the metropolitan and nonmetropolitan areas, respectively, of regions east of the Mississippi. The one exception is that the proportion of family physician/general practitioners with surgery assisting privileges in the nonmetropolitan areas of the East North Central region is equally as high as in the nonmetropolitan areas west of the Mississippi.

### **Comment**

Many factors contribute to the significant differences in proportions of family physician/general practitioners with hospital practice privileges among census regions and also between metropolitan and nonmetropolitan areas within regions.

\*An SMSA is defined in general as having either (1) one city of 50,000 or more inhabitants; or (2) one city with at least 25,000 inhabitants, which, when combined with contiguous places having a density of 1,000 or more people per square mile, will have a population of at least 50,000.

**Table 8. Percentage of AAFP Active Members in Direct Patient Care, Office Based Who Care for Patients in Various Categories by Standard Metropolitan Statistical Area (SMSA) vs non-SMSA within Region, December 1980**

	Perform Obstetric Routine Care	Perform Obstetric Complicated Delivery	Perform Obstetric High Risk	Perform Cesarean Sections	Perform Surgery Assisting	Perform Surgery Intermediate	Perform Surgery Major
New England**							
SMSA (312)	12.8	2.9	2.2	1.3	33.0	16.0	2.6
Non-SMSA (169)	32.5*	11.8*	9.5*	1.8	49.1*	19.5	4.1
Middle Atlantic							
SMSA (416)	9.3	1.7	1.8	0.2	15.5	5.5	1.2
Non-SMSA (64)	16.9	7.8*	7.8*	0.0	35.6*	9.4	1.6
East North Central							
SMSA (302)	35.9	12.6	10.7	3.8	48.4	25.2	6.5*
Non-SMSA (148)	64.1*	43.6*	32.5*	24.0*	83.9*	46.3*	20.6*
West North Central							
SMSA (192)	67.3	25.3	17.5	10.2	68.3	45.5	9.9*
Non-SMSA (302)	81.2*	59.4*	43.1*	37.1*	84.7*	58.4*	28.5*
South Atlantic							
SMSA (278)	9.3	2.9	2.3	1.8	14.1	6.0	3.7*
Non-SMSA (195)	31.8*	20.0*	17.9*	10.8*	33.9*	20.6*	10.8*
East South Central							
SMSA (223)	14.8	9.4	5.4	3.6	31.4	17.9	6.3
Non-SMSA (270)	43.8*	32.0*	22.7*	21.4*	60.8*	38.4*	21.2*
West South Central							
SMSA (289)	24.2	16.2	12.7	14.1	62.5	44.1	27.2*
Non-SMSA (173)	62.0*	48.3*	35.7*	43.7*	81.7*	63.7*	38.0*
Mountain							
SMSA (244)	28.9	8.0	2.9	4.5	76.2	32.8	10.6
Non-SMSA (218)	72.0*	52.7*	41.4*	40.7*	82.4	63.9*	42.5*
Pacific							
SMSA (408)	27.5	10.1	5.2	8.6	81.0	39.7	14.0
Non-SMSA (103)	66.5*	49.0*	29.0*	43.3*	88.2	64.2*	30.5*
Total Number							
SMSA (2,664)	25.5	9.6	6.8	5.4	48.1	25.6	9.2*
Non-SMSA (1,642)	57.7*	40.8*	30.1*	27.6*	70.3*	46.0*	23.6*

\*Proportions are statistically significant at P<.05  
 \*\*Extreme care should be used in comparing SMSA vs non-SMSA in New England, since SMSAs are defined using the town as the primary unit rather than the county

Some of these factors are community size, hospital size, training, and personal clinical interest of the physician as well as ratios to population of the various specialists. After a comparison was made of the 1978 totals of nonfederal office based physicians by specialty and census division<sup>11</sup> with the 1978 resident population estimates by census division,<sup>13</sup> one factor which appears to be of importance in some regions is the low physician to population ratio in specialties other than family practice, particularly obstetricians and surgeons.

The West North Central region was previously identified as an area of the country where family physician/general practitioners are more likely to have hospital privileges in all areas of obstetric care than are their colleagues in other regions. One

possible explanation is that this region has the lowest obstetric-gynecology ratio per 100,000 population.

Very few family physician/general practitioners in the New England and the Middle Atlantic states had privileges in surgery at whatever level; these same two regions had two of the highest general surgeon ratios. The regions west of the Mississippi River, the Pacific, Mountain, West North Central, and West South Central, were previously identified as areas of the country where a higher proportion of family physician/general practitioners have privileges in surgery at whatever level than physicians east of the river. The West South Central and West North Central regions have the two lowest general surgeon ratios while the Mountain

and Pacific regions have two of the highest general surgeon ratios.

The variations among census regions in percentages of family physician/general practitioners with specific hospital privileges should be viewed in perspective. The vast majority in each census region registered no complaints, reporting that the hospital privileges they were granted were appropriate.

Response rates were high enough in the study that results accurately reflect the hospital practice of the target population, active members of the American Academy of Family Physicians. However, because the study was thus limited, there may be some question as to representation of all family physician/general practitioners.

## Conclusions

1. The vast majority of family physician/general practitioners in direct patient care in an office based setting are estimated to have hospital admission privileges at one or more hospitals. Only in the Middle Atlantic and South Atlantic states are the proportions slightly less than 95 percent.

2. A higher proportion of family physician/general practitioners in the West North Central region have privileges in routine obstetric care, complicated delivery, and obstetric patients at high risk than in other census regions. A very small proportion in the Middle Atlantic include obstetrics in their practice compared to the other census regions. Of those excluding all levels of obstetric care from their practice, a higher proportion in the Pacific region reported as their reason the high cost of liability insurance.

3. A higher percentage of family physician/general practitioners in regions west of the Mississippi River have privileges in surgery, at whatever level, than their colleagues in regions east of the river. A very small percentage in the Middle Atlantic region have privileges in surgery.

4. Family physician/general practitioners in the nonmetropolitan areas of each census region were more likely to have hospital practice privileges at any level than were their colleagues in the metropolitan areas of the same region.

5. Some of the disparities among census regions, and between SMSA and non-SMSA areas,

in the proportions of family physician/general practitioners with certain hospital privileges may be explained in part by the ratio of specialists in obstetrics and surgery to population.

6. Although disparities in the proportions of family physician/general practitioners with certain hospital privileges exist among regions, the vast majority in each region indicated that the privileges afforded them were appropriate.

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