Pilot Study of Medical Practices in Medical Arts Buildings

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PRIVATE MEDICAL practice in the United States appears to be changing. It has been suggested that concurrent alterations are occurring in both the organization and location of medical practice. Underlying both changes, it seems, are fundamental transformations in the role of the private practitioner.

Several observers have delineated the nature of the changes as follows.

1. The practicing physician is abandoning his home as the primary site of office practice and relocating in a medical arts building or similar location, indicating that a centralization of medical practice is taking place (*1–4*).

2. The organization of medical practice is shifting from a relatively simple structure to one more complex in nature (*3, 5–7*).

3. Growth in the number and types of specialties and subspecialties suggests that different organization structures and locations of office practice may exist to accommodate the needs of various types of specialists (*5, 8–16*).

It is difficult to assess objectively those apparent changes in medical practice because of the paucity of data resulting from systematic study.

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Freidson and Rhea (*17*), in evaluating this situation, wrote:

> Much is being written about physicians in the United States, but little of it is based on any systematic collection of information. This is not only true in general, but also in particular: lengthy and pontifical discussions of "private practice" are largely based on severely limited personal experience and observation, and only rarely on any shreds of objective information. Like solo practice, group practice too is discussed more as a way of life than as a form of human organization whose character can be studied systematically and in detail.

Framework of the Pilot Study

It was felt that within medical arts buildings in the District of Columbia many different types of relationships and formal arrangements might exist among physicians practicing a wide variety of specialties (*7, 18*). In addition, these locations might represent "a slight approach to the health center idea" (*19*) and an example of the trend toward the centralization of medical practice (*20*). The pilot study was an attempt to focus in a descriptive, but systematic, manner on the medical practices in these buildings.

The District of Columbia is in many respects an atypical urban area in which to study the organization and location of practice. For every 100,000 persons, there are about 213 physicians as compared with a national average of 110. In addition the ratio of psychiatrists to population is higher, and that of general practitioners to population lower than the national

average (*21*). Therefore, study results are limited to the population surveyed.

A total of 1,435 physicians were engaged in full-time private practice in the District of Columbia. The City Directory (1964 edition) listed almost 63 percent of all physicians (898) at buildings in which at least one other physician also maintained an office. About 576 of these physicians maintained private practices in buildings, other than hospitals or group practice clinics, which contained 10 or more practitioners. These 576 physicians made up the study population.

A 30-item pretested questionnaire was mailed to each physician in the study group. Initial and followup mailings produced a response from almost 60 percent (341 physicians). Not all physicians returning questionnaires responded to all 30 questions.

Findings

All medical arts buildings included in the study are located in Northwest Washington, where the majority of physicians practice (*21*). Ten buildings are in the downtown portion of the city and the remaining five in residential areas. Only three medical arts buildings are adjacent to a hospital. A host of health personnel and services, such as dentists, podiatrists, optometrists, medical laboratories, radiological services and pharmacies, and the like, are found in a number of these buildings.

While there was a similarity in average age between respondent physicians (49 years) and other physicians in private practice (50.4 years), there was a difference in board certification. Of the respondent group, 70 percent were board certified. Only 56 percent of the other physicians in the city were so certified.

The distribution of respondents by specialty and building is found in table 1. Apparently the larger the number of physicians in a building, the greater is the range of specialties represented. Psychiatry, however, was the exception. Most psychiatrists practiced in buildings in which only other psychiatrists maintained offices. The same situation has been described by Knowles in relation to the psychiatrist and the hospital (*22*).

Pediatricians and general practitioners did not appear to select offices in medical arts buildings in the District of Columbia. While these specialists represented more than one-quarter of all physicians engaged in private practice in Washington, they comprised only 3 percent of physicians in medical arts buildings.

For the purpose of this study, two types of practice organization were delineated: practice in association and independent practice. As

Table 1. Percent distribution of physicians by primary specialty and building

Building	Number of physicians	Internal medicine	Medical specialties [1]	General surgery	Surgical specialties [2]	Psychiatry	Obstetrics-gynecology	Diagnostic specialties [3]	General practice
1	48	12.5	20.8	20.8	16.7	2.1	12.5	6.2	8.3
2	49	26.5	20.4	12.2	18.4	2.0	10.2	4.1	6.1
3	33	27.3	21.2	15.2	15.2	--	6.1	3.0	12.1
4	38	39.5	10.5	10.5	21.1	5.3	5.3	--	7.9
5	23	26.1	34.8	8.7	17.4	--	4.3	4.3	4.3
6	21	28.6	23.8	19.0	--	--	14.3	4.8	9.5
7	22	4.5	--	4.5	--	90.9	--	--	--
8	25	12.0	12.0	--	4.0	44.0	20.0	4.0	4.0
9	16	37.5	12.5	25.0	12.5	--	12.5	--	--
10	13	38.5	--	--	15.4	15.4	30.8	--	--
11	10	--	10.0	30.0	10.0	--	30.0	10.0	10.0
12	10	--	20.0	30.0	--	--	40.0	--	10.0
13	10	30.0	20.0	40.0	--	--	10.0	--	--
14	11	9.1	18.2	--	--	63.6	--	--	9.1
15	12	--	--	--	--	100.0	--	--	--
Total	341	21.7	16.4	13.5	11.7	16.4	11.1	2.9	6.2

[1] Allergy, dermatology, ophthalmology, otolaryngology, and subspecialties of internal medicine.
[2] Orthopedic surgery, colon and rectal surgery, thoracic surgery, neurosurgery, urology, and plastic surgery.
[3] Radiology and pathology.

Table 2. Percent distribution of physicians in association by primary specialty and specialty of associates

Primary specialty	Number of physicians	Specialty of associates		
		Same	Other	Nonmedical [1]
Internal medicine	53	77.4	22.6	0
Medical specialties	30	70.0	30.0	0
General surgery	39	66.7	33.3	0
Surgical specialties	29	55.2	44.8	0
Psychiatry	35	97.1	2.9	0
Obstetrics-gynecology	29	58.6	41.4	0
Diagnostic specialties	7	85.7	14.3	0
General practice	9	55.6	33.3	11.1
Total	231	71.9	27.7	.4

[1] Dentists, podiatrists, and optometrists.

defined in the questionnaire, "in association" includes relationships such as sharing offices, sharing some practice expenses, being an assistant to another physician, being on salary, a partner, etc. The absence of all such relationships was taken to indicate an independent type of practice organization. In response to the question "Do you practice medicine at the survey location in association with one or more physicians?", more than 68 percent (231) of the physicians indicated they practiced in association and the remainder (110) that they were independent practitioners.

The majority of associated practices involved only two physicians. However, almost 20 percent of 228 reporting associated physicians practiced with three or more other physicians:

Number of physicians in association	*Percent*
2	55.7
3	25.0
4	11.0
5 or more	8.3
Total	100.0

The vast majority of physicians in associated practice were engaged in the same specialty as their associates. However, differences in specialties of associated physicians existed (table 2). While all psychiatrists except one practiced in association with other psychiatrists, almost 45 percent of surgical specialists associated with physicians practicing specialties different from their own.

Whether a physician practiced in association or independently appeared to depend to some degree on the year he completed his internship and the specialty he practiced. Physicians who completed internships since 1940 practiced with associates to a greater extent than those who completed them before 1941 (table 3). This finding is in keeping with those of Aldrich and Spitz (*5*) and Kroeger and associates (*14*).

Data in table 4 indicate that of all physicians, general practitioners, medical specialists, and psychiatrists are least likely to practice in association. However, between 75 and 85 percent of general surgeons, surgical specialists, and

Table 3. Percent distribution of physicians by year completing internship and practice organization

Year	Total physicians (N=338)[1]	Associated (N=231)	Not associated (N=106)
1930 and earlier	14.5	12.6	18.9
1931–40	29.6	26.0	36.8
1941–50	34.6	37.2	29.2
1951–60	21.3	24.2	15.1

[1] Includes 3 physicians not specifying type of practice organization.

Table 4. Percent distribution of physicians by primary specialty and practice organization

Primary specialty	Number reporting	Associated	Not associated
Internal medicine	74	71.6	28.4
Medical specialties [1]	54	53.7	46.3
General surgery	46	84.8	15.2
Surgical specialties [2]	40	75.0	25.0
Psychiatry	56	62.5	37.5
Obstetrics-gynecology	38	76.3	23.7
Diagnostic specialties [3]	10	70.0	30.0
General practice	21	47.6	52.4
Total	339	68.4	31.6

[1] Allergy, dermatology, ophthalmology, otolaryngology, and subspecialties of internal medicine.
[2] Orthopedic surgery, colon and rectal surgery, thoracic surgery, neurosurgery, urology, and plastic surgery.
[3] Radiology and pathology.

obstetrician-gynecologists selected this type of practice organization.

The following list describes the nature of arrangements between physicians who practiced in association.

1. Sixty-one percent of associates were generally in the office during the same hours.
2. Fifty-six percent shared the services of one or more office personnel.
3. Almost 80 percent of physicians with laboratory equipment shared it with associates.
4. Eighty-seven percent of physicians with diagnostic X-ray equipment shared it with associates.
5. About half had their practices covered by associates during vacations and emergency situations.
6. Sixty-three percent shared knowledge about individual patients, medical records, or responsibility for patient care.
7. More than 90 percent shared the cost of one or more elements of office expense. (The remainder were on salary and therefore did not directly enter into this arrangement.)
8. More than 40 percent shared the income of office practice.

Several differences existed between physicians who practiced in association and those practicing independently.

Physicians who practiced in association were more likely to have had both first and second periods of residency training, as well as a short-term training course in the preceding 3 years (table 5). A larger percentage of independent physicians had a long-term training course beyond the residency than did associated physicians. However, the difference between the two types of physicians in each case was small.

Table 5. Percent distribution of physicians by residency and post residency training and practice organization

Type of training	Total physicians	Associated	Not associated
First residency:			
With	95.0	97.4	89.7
Without	5.0	2.6	10.3
Second residency:			
With	41.1	43.9	35.8
Without	58.9	56.1	64.2
Post residency short-term:			
With	35.8	37.9	31.7
Without	64.2	62.1	68.3
Post residency long-term:			
With	43.4	42.0	45.3
Without	56.6	58.0	54.7

Table 6. Percent distribution of physicians by number of weeks of vacation in an average year and practice organization

Number of weeks	Total physicians (N=331) [1]	Associated (N=225)	Not associated (N=105)
0	3.0	3.1	2.9
1	3.9	3.5	4.9
2	24.2	17.6	38.2
3	25.1	23.3	29.4
4	26.6	32.2	14.7
5 or more	17.2	20.3	9.8

[1] Includes 1 physician not specifying type of practice organization.

Table 7. Percent distribution of physicians by average number of patients seen in an average week and practice organization

Number of patients	Total physicians (N=311) [1]	Associated (N=213)	Not associated (N=96)
Less than 25	26.7	26.8	26.0
25–49	29.6	31.5	26.0
50–74	18.0	21.6	10.4
75–99	10.6	9.4	12.5
100–149	10.6	7.5	17.7
150–199	3.9	2.3	7.3
200 or more	.6	.9	----------

[1] Includes 2 physicians not specifying type of practice organization.

A significantly larger percentage of associated physicians hold teaching appointments in a medical school or teaching hospital than their independent counterparts. Of 324 physicians responding—222 practicing in association, 100 practicing independently, and 2 not specifying type of practice organization—78.8 percent of the physicians practicing in association held teaching appointments in a medical school or teaching hospital. Only 67 percent of physicians practicing independently held such positions.

One of the clearest differences between associated and independent physicians related to the number of weeks of vacation that each took. More than half of the associated physicians

Table 8. Percent distribution of physicians most frequently consulted, to whom patients are referred, and from whom referrals are received by respondents' practice organization

Location of physicians consulted	Total physicians	Associated	Not associated
Consultants:			
Associates	12.7	19.1	--------
Others in building	32.1	33.8	29.1
Others outside building	55.2	47.1	70.9
Make referrals:			
Associates	6.6	9.7	--------
Others in building	37.6	39.4	34.2
Others outside building	55.8	50.9	65.8
Receive referrals:			
Associates	4.0	5.9	--------
Others in building	24.6	24.9	24.2
Others outside building	71.4	69.3	75.8

had 4 weeks or more of vacation in an average year while less than 25 percent of independent physicians did the same (table 6). Not only did a larger percentage of physicians who practiced in association have more weeks of vacation than independent physicians, but they also saw fewer patients in a typical week. More than 37 percent of independent physicians saw 75 or more patients in an average week, whereas only 20 percent of associated physicians saw this many patients (table 7). This is undoubtedly related to the type of specialties predominating in the two groups and deserves further exploration.

Associated physicians consulted with, referred patients to, and received referrals from other physicians who practiced in their own medical arts building to a greater extent than was true of independent physicians (table 8). In addition, of 325 physicians responding—220 practicing in association, 101 practicing independently, and 4 not specifying type of practice organization—59.4 percent held informal, face-to-face consultations with others in their medical arts building in an average week. Of those in association, 64.5 percent held these consultations and 35.5 did not; of those practicing independently, 48.5 percent held consultations and 51.5 did not. These findings support Hall's suggestion "that the inner fraternity referred always toward its own members, and never toward outsiders" (*13*).

Finally, associated physicians depended on others located within their own medical arts buildings to cover their practices, whereas independent physicians, even though in medical arts building, appeared to rely in most cases on physicians located outside their building (table 9).

Areas in which the type of practice organization had little or no effect include the extent to which physicians utilized community health resources, the referral of patients for diagnostic X-ray and laboratory services within medical arts buildings, and the degree of satisfaction or dissatisfaction with an office located in a medical arts building.

Summary

The results of the pilot study suggest that a range in the organization of medical practice exists, with solo practice at one extreme and group practice at the other. In addition, differences exist between physicians who establish

Table 9. Percent distribution of methods of covering practices during absences by type of practice organization

Method of covering practice	Total	Associated	Not associated
During vacation:			
No coverage necessary	6.5	6.3	6.9
Physicians in association	34.3	51.7	--------
1 or 2 physicians in building	12.8	10.5	17.2
1 or 2 physicians outside building	25.8	17.8	41.4
A number of different physicians	10.9	6.6	19.3
Others [1]	9.7	7.0	15.2
Emergency care:			
No coverage necessary	8.8	8.8	10.2
Physicians in association	34.3	51.7	--------
1 or 2 physicians in building	11.5	8.5	17.5
1 or 2 physicians outside building	32.5	15.1	56.2
A number of different physicians	12.9	7.7	16.1

[1] Hospital emergency rooms and telephone exchanges.

NOTE: Number of responses is greater than total number of physicians because respondents could check 2 methods of covering practices; distribution is of response.

arrangements with associates and those who do not. These arrangements, relating to coverage of practice and sharing of income, expenses, personnel, equipment, and some responsibility for patient care, suggest that practice in association has some characteristics of group practice.

The data indicate that medical arts buildings in the District of Columbia are chosen by a large proportion of practicing physicians as a site of office practice. Both the large number of physicians and broad range of specialties represented, despite the virtual absence of pediatricians and general practitioners, suggest that a survey of practices in medical arts buildings is valuable in studying the organization of private medical practice.

Perhaps this pilot study will help to bridge the gap in information about the organization of medical practice. It is hoped that it will provoke similar studies in other areas of the country, as well as studies examining the situation in greater depth.

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