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# Physician Marketplace Report

Center for  
Health Policy  
Research

## **The Practice Arrangements of Patient Care Physicians, 1999 (Revised)**

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In 2001, we issued a report (PMR 2001-02) on the distribution of physicians, by age, across practice arrangements of different types and sizes. Recently, we discovered that physician age in that report was estimated using the assumption of medical school graduation at age 26 rather than calculated based on known birth year. This had the effect of understating physician age by approximately one year. This report provides revised and corrected information on physicians' practice arrangements in 1999. The estimates that are not specific to any particular age category are the same in the two reports. Namely, Figures 1 and 2 and the estimates in the "Total" categories of Table 1 remain unchanged. It is only the age category-specific estimates that differ between the two reports.

This report describes the 1999 practice arrangements of allopathic patient care physicians. The information contained within was generated using two sources of information, the 1999 year-end AMA Physician Masterfile and the 1999 AMA Socioeconomic Monitoring System (SMS).

The Masterfile provides information on all physicians in the U.S. The analysis in this report was limited to the 625,334 physicians who, at the end of 1999, were active (i.e., who worked at least 20 hours per week) and spent most of their time in patient care. Patient care physicians report a major professional activity in one of the following categories: hospital based, graduate medical education, office based, or locum tenens. The report excludes the 75,893 physicians who were inactive, the 44,615 physicians who were in non-patient care, and the 51,792 physicians who could either not be classified or whose address was unknown.

The SMS survey collects information from a sample, drawn from the Masterfile, of non-federal patient care physicians who have completed their graduate medical education (GME). The 1999 survey included 3,341 physicians and had a 41.9% response rate. The SMS data presented here have been weighted to correct for possible non-response bias.

While the Masterfile provides information about whether a patient care physician is federally employed and whether she has finished her graduate medical education, it does not provide more detailed information on practice arrangement. Therefore, I used the distribution of physicians by practice arrangement, obtained from the SMS, to estimate the number of physicians who were self-employed, employees of physician owned groups, and institutional employees. Estimates of the number of institutional employees in various settings and the number of physicians in practices of different sizes were generated in a similar fashion.

## **PHYSICIANS' PRACTICE ARRANGEMENTS**

The three pie charts in Figure 1 allocate the 625,334 allopathic patient care physicians into successively more detailed categories.

### **Patient Care Physicians**

The first pie chart in Figure 1 allocates patient care physicians into the following three categories:

- *Federal Employees*: physicians in this category are employed by the military, the U.S. Public Health Service, or the Veterans Administration;
- *Non-Federal GME*: physicians who are not federally employed and are in residency training or clinical fellowship programs; and
- *Non-Federal Post-GME*: physicians who are not federally employed and have completed their graduate medical education.

Non-federal post-GME physicians account for the largest share of patient care physicians, 82.9% (518,195) in 1999. Fewer than 3.0% of patient care physicians were federally employed in 1999 and 14.8% were still completing their graduate medical education.

### **Non-Federal Post-GME Physicians**

In the second pie chart in Figure 1, non-federal post-GME physicians are allocated to the following three categories according to their practice arrangements:

- *Self-Employed*: physicians who report that they have a full or part ownership interest in their practice. Independent contractors are also included in this category;
- *Employees of Physician Owned Practices*: physicians who do not have an ownership interest in their practice but who work for a physician owned practice; and
- *Institutional Employee Physicians*: physicians who do not have an ownership interest in their practice and do not work for a physician owned practice.

Most non-federal post-GME physicians, 62.0% in 1999, are self-employed. Approximately 9.0% were employed in a physician owned practice, and the other 29.4% were employed in an institutional setting.

### **Institutional Employees**

The final pie chart in Figure 1 allocates institutional employees among the following types of employers:

- *Hospitals*: all hospitals not owned by medical schools, universities, state or local governments, or health maintenance organizations;
- *Medical Schools and Universities*;

- *State and Local Governments;*
- *Health Maintenance Organizations (HMOs);*
- *Ambulatory Care Sites; and*
- *“Other” Institutional Employers.*

Hospitals and medical schools each accounted for approximately 26.0% of institutional employment in 1999. Nearly 11.0% of institutional employees worked for state or local governments and 8.9% were employed by HMOs. Very few, 3.0%, worked in ambulatory care sites and the remaining 25.0% worked in other settings.

## **THE SIZE OF PHYSICIANS’ PRACTICES**

Figure 2 describes the practice sizes of self-employed physicians and physicians employed in physician owned practices. Forty-two percent of self-employed physicians were in solo practice in 1999. One-quarter worked in practices with two to four physicians and 14.0% in practices with five to nine and with 10 to 49 physicians. Less than 5.0% of self-employed physicians worked in practices with 50 or more physicians.

Employed physicians generally work in larger practices than self-employed physicians. While less than 3.0% of employees were in solo practice more than 18.0% worked in practices with 50 or more physicians. The remaining 79.1% of employed physicians were nearly evenly distributed among practices with two to four, five to nine, and 10 to 49 physicians.

## **PRACTICE ARRANGEMENT AND PHYSICIAN AGE**

Table 1 describes how physicians’ practice arrangements vary according to their age. The leftmost four columns simply show the number of physicians in each age category and practice arrangement. The middle four columns show, within each age category, the number of physicians in that specific practice arrangement as a percent of physicians in the practice arrangement category “one level up.” The rightmost four columns show the number of physicians in that specific practice arrangement and age category as a percent of all patient care physicians. For example, the 11,382 physicians under the age of 40 who worked in hospitals represented 29.2% of all institutional employees in that age category and 1.8% of all patient care physicians.

Beginning at the top of the table it is evident that the percent of patient care physicians who are non-federal post-GME increases as one moves to higher age categories: 54.9% of physicians under the age of 40, 95.1% between the ages of 40 and 54, and 97.5% of those over the age of 54. The greatest number of non-federal post-GME physicians are between the ages of 40 and 54, 251,613 in 1999. The percent of patient care physicians who were federally employed varied little across age category.

Among physicians who are post-GME, the percent that are self-employed increases with age. Less than 50.0% of post-GME physicians under the age of 40, 63.7% between 40 and 54, and 69.8% over the age of 54 were self-employed in 1999. The percent of self-employed physicians in solo practice also increases with age. While only 28.0% of self-employed physicians under the age of 40 were in solo practice, 55.2% of those over the age of 54 were.

Post-GME physicians under the age of 40 were more than three times as likely as physicians age 55 and older to be employed in physician owned practices, 17.5% compared to 5.3%, respectively.

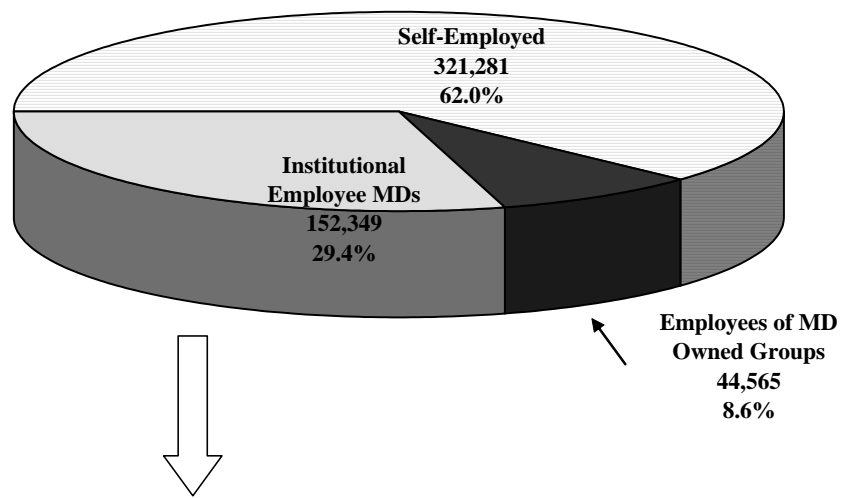
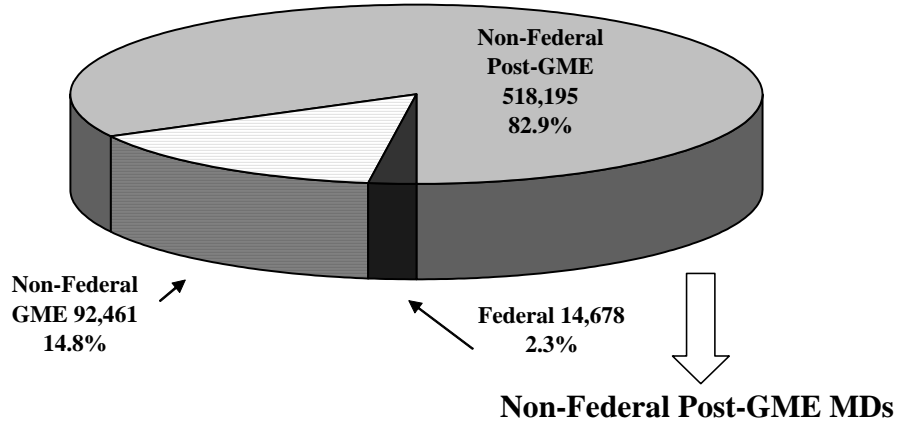
While 35.5% of post-GME physicians under the age of 40 were institutional employees in 1999, only 29.3% of physicians between 40 and 54, and 24.9% of those older than 54 were. Institutional employees under the age of 40 were more highly concentrated in hospital and medical school settings than physicians over the age of 54, 64.4% compared to 42.3%. On the other hand, older physicians were more than twice as likely to be employed by state and local governments or HMOs, 32.0% compared to 9.3%.

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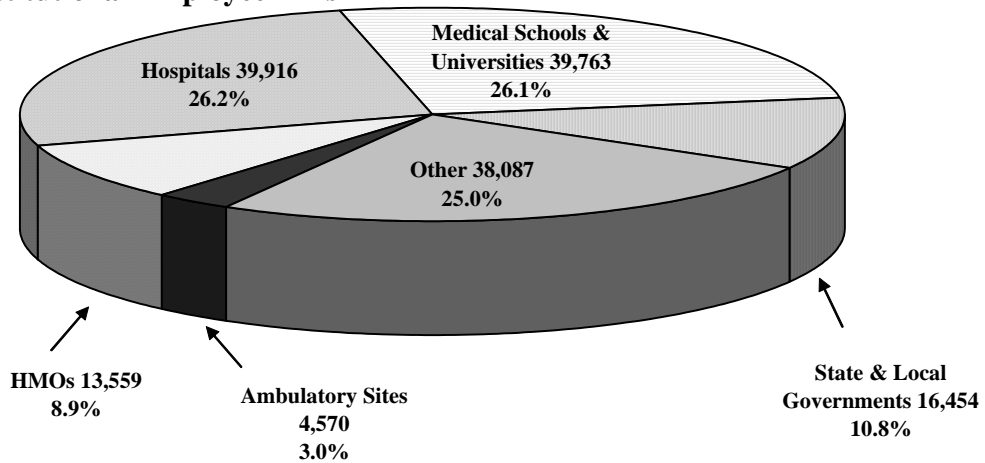
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**Figure 1**  
**Distribution of Patient Care Physicians by Employment Status, 1999**

**Patient Care MDs**  
**N=625,334**

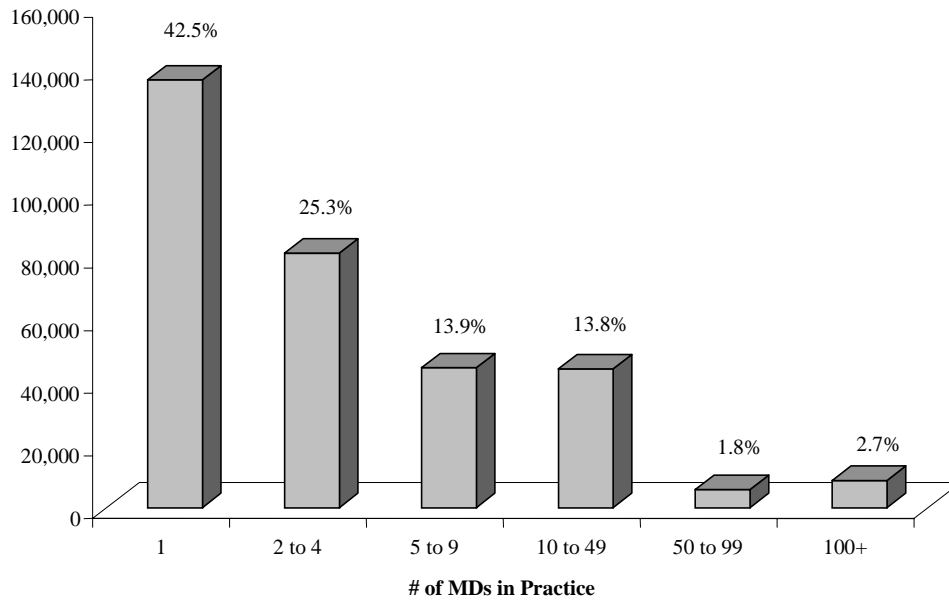


**Institutional Employee MDs**

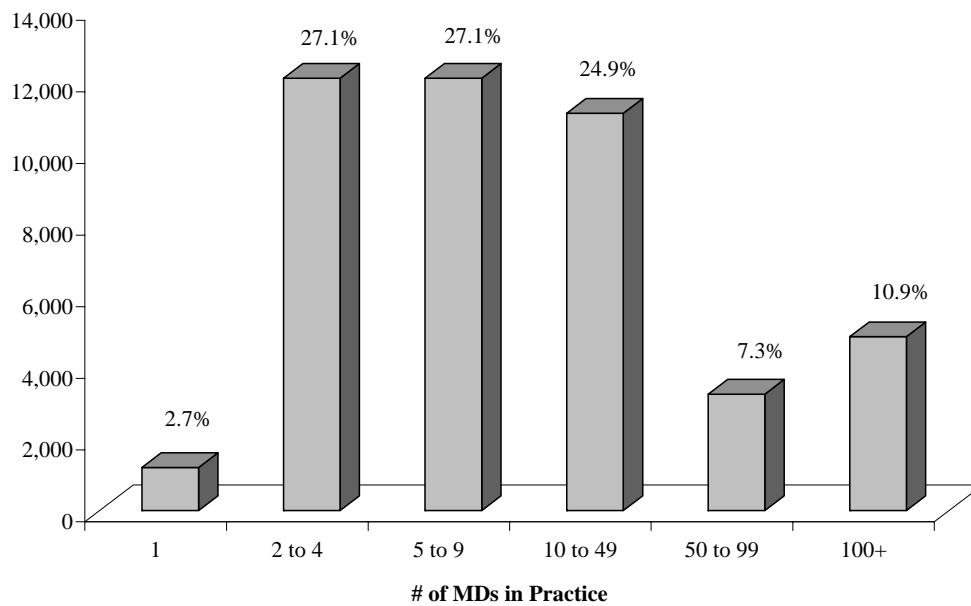


**Figure 2**  
**Distribution of Physicians by Practice Size, 1999**

**Self-Employed**



**Employees of MD Owned Groups**



**Table 1. Practice Organization of Patient Care Physicians With Respect to Physician Age, 1999**

|  | Number of Physicians |                |                |                | As a Percent of Category |              |              |              | As a Percent of All Patient Care Physicians |             |             |              |
|--|----------------------|----------------|----------------|----------------|--------------------------|--------------|--------------|--------------|---|-------------|-------------|--------------|
|  | Age Less Than 40     | 40 – 54        | 55 +           | Total          | Age Less Than 40         | 40 – 54      | 55 +         | Total        | Age Less Than 40                            | 40 – 54     | 55 +        | Total        |
| <b>Total</b>                             | <b>200,084</b>       | <b>264,483</b> | <b>160,767</b> | <b>625,334</b> | <b>100.0</b>             | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> | <b>32.0</b>                                 | <b>42.3</b> | <b>25.7</b> | <b>100.0</b> |
| <b>Federal</b>                           | 4,500                | 6,409          | 3,769          | 14,678         | 2.2                      | 2.4          | 2.3          | 2.3          | 0.7   | 1.0         | 0.6         | 2.3          |
| Non-Federal GME                          | 85,825               | 6,461          | 175            | 92,461         | 42.9                     | 2.4          | 0.1          | 14.8         | 13.7  | 1.0         | 0.0         | 14.8         |
| Non-Federal Post-GME                     | 109,759              | 251,613        | 156,823        | 518,195        | 54.9                     | 95.1         | 97.5         | 82.9         | 17.6  | 40.2        | 25.1        | 82.9         |
| <b>Non-Federal Post-GME</b>              | <b>109,759</b>       | <b>251,613</b> | <b>156,823</b> | <b>518,195</b> | <b>100.0</b>             | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> | <b>17.6</b>                                 | <b>40.2</b> | <b>25.1</b> | <b>82.9</b>  |
| Self-Employed                            | 51,576               | 160,212        | 109,493        | 321,281        | 47.0                     | 63.7         | 69.8         | 62.0         | 8.2   | 25.6        | 17.5        | 51.4         |
| Employees of MD Owned Groups             | 19,175               | 17,125         | 8,265          | 44,565         | 17.5                     | 7.0          | 5.3          | 8.6          | 3.1   | 2.7         | 1.3         | 7.1          |
| Institutional Employee Physicians        | 39,008               | 74,276         | 39,065         | 152,349        | 35.5                     | 29.3         | 24.9         | 29.4         | 6.2   | 11.9        | 6.2         | 24.4         |
| <b>Institutional Employee Physicians</b> | <b>39,008</b>        | <b>74,276</b>  | <b>39,065</b>  | <b>152,349</b> | <b>100.0</b>             | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> | <b>6.2</b>                                  | <b>11.9</b> | <b>6.2</b>  | <b>24.4</b>  |
| Hospitals                                | 11,382               | 19,486         | 9,048          | 39,916         | 29.2                     | 26.1         | 23.2         | 26.2         | 1.8   | 3.1         | 1.4         | 6.4          |
| Medical Schools & Universities           | 13,727               | 18,559         | 7,477          | 39,763         | 35.2                     | 25.2         | 19.1         | 26.1         | 2.2   | 3.0         | 1.2         | 6.4          |
| State & Local Governments                | 1,720                | 7,495          | 7,239          | 16,454         | 4.4                      | 10.5         | 18.5         | 10.8         | 0.3   | 1.2         | 1.2         | 2.6          |
| HMOs                                     | 1,892                | 6,421          | 5,246          | 13,559         | 4.9                      | 8.8          | 13.4         | 8.9          | 0.3   | 1.0         | 0.8         | 2.2          |
| Ambulatory Sites                         | 1,974                | 1,803          | 793            | 4,570          | 5.1                      | 2.4          | 2.0          | 3.0          | 0.3   | 0.3         | 0.1         | 0.7          |
| Other                                    | 8,313                | 20,512         | 9,262          | 38,087         | 21.3                     | 27.1         | 23.7         | 25.0         | 1.3   | 3.3         | 1.5         | 6.1          |

**Table 1 (continued). Practice Organization of Patient Care Physicians With Respect to Physician Age, 1999**

|  | Number of Physicians |                |                |                | As a Percent of Category |              |              |              | As a Percent of All Patient Care Physicians |             |             |             |
|--|----------------------|----------------|----------------|----------------|--------------------------|--------------|--------------|--------------|---|-------------|-------------|-------------|
|  | Age Less Than 40     | 40 – 54        | 55 +           | Total          | Age Less Than 40         | 40 – 54      | 55 +         | Total        | Age Less Than 40                            | 40 – 54     | 55 +        | Total       |
| <b>Self-Employed<br/>(by practice size)</b>                    | <b>51,576</b>        | <b>160,212</b> | <b>109,493</b> | <b>321,281</b> | <b>100.0</b>             | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> | <b>8.2</b>                                  | <b>25.6</b> | <b>17.5</b> | <b>51.4</b> |
| 1 MD   | 14,416               | 61,656         | 60,472         | 136,544        | 28.0                     | 39.9         | 55.2         | 42.5         | 2.3   | 9.9         | 9.7         | 21.8        |
| 2 to 4 MDs   | 14,591               | 42,681         | 24,012         | 81,284         | 28.3                     | 26.3         | 21.9         | 25.3         | 2.3   | 6.8         | 3.8         | 13.0        |
| 5 to 9 MDs   | 8,943                | 25,007         | 10,708         | 44,658         | 17.3                     | 15.1         | 9.8          | 13.9         | 1.4   | 4.0         | 1.7         | 7.1         |
| 10 to 49 MDs   | 10,021               | 24,078         | 10,238         | 44,337         | 19.4                     | 14.6         | 9.4          | 13.8         | 1.6   | 3.9         | 1.6         | 7.1         |
| 50 to 99 MDs   | 1,377                | 3,037          | 1,369          | 5,783          | 2.7                      | 1.9          | 1.3          | 1.8          | 0.2   | 0.5         | 0.2         | 0.9         |
| 100+ MDs   | 2,228                | 3,753          | 2,694          | 8,675          | 4.3                      | 2.3          | 2.5          | 2.7          | 0.4   | 0.6         | 0.4         | 1.4         |
| <b>Employees of<br/>MD Owned Groups<br/>(by practice size)</b> | <b>19,175</b>        | <b>17,125</b>  | <b>8,265</b>   | <b>44,565</b>  | <b>100.0</b>             | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> | <b>3.1</b>                                  | <b>2.7</b>  | <b>1.3</b>  | <b>7.1</b>  |
| 1 MD   | 184                  | 1,019          | 0              | 1,203          | 1.0                      | 5.0          | 0.0          | 2.7          | 0.0   | 0.2         | 0.0         | 0.2         |
| 2 to 4 MDs   | 5,512                | 4,503          | 2,062          | 12,077         | 28.7                     | 26.5         | 24.9         | 27.1         | 0.9   | 0.7         | 0.3         | 1.9         |
| 5 to 9 MDs   | 6,297                | 3,827          | 1,953          | 12,077         | 32.8                     | 23.5         | 23.6         | 27.1         | 1.0   | 0.6         | 0.3         | 1.9         |
| 10 to 49 MDs   | 4,406                | 3,411          | 3,280          | 11,097         | 23.0                     | 21.6         | 39.7         | 24.9         | 0.7   | 0.5         | 0.5         | 1.8         |
| 50 to 99 MDs   | 1,620                | 1,407          | 226            | 3,253          | 8.5                      | 7.7          | 2.7          | 7.3          | 0.3   | 0.2         | 0.0         | 0.5         |
| 100+ MDs   | 1,156                | 2,958          | 744            | 4,858          | 6.0                      | 15.7         | 9.0          | 10.9         | 0.2   | 0.5         | 0.1         | 0.8         |