Managed Care and Physicians’ Provision of Charity Care

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Objectives
To examine the association between managed care and physicians’ provision of charity care.

Methods
A nationally representative sample of 10,881 physicians from 60 randomly selected communities.

Results
Overall, 77.3% of respondents provided an average of 10.3 hours of charity care per week. Physicians who derive at least 85% of their practice revenue from managed care plans were considerably less likely to provide charity care and spend fewer hours providing charity care than physicians with little involvement in managed care plans (P = .01). In addition, physicians who practice in areas with high managed care penetration provided fewer hours of charity care than physicians in other areas, regardless of their own level of involvement with managed care (P < .01). Differences in charity care provision were also shown for other important factors, including ownership of the practice and practice arrangements (more charity care occurred in solo and 2-physician practices; P < .01).

Conclusion
Physicians involved with managed care plans and those who practice in areas with high managed care penetration tend to provide less charity care.

Context
Health system changes may be affecting the ability of physicians to provide care with little or no compensation from patients who are uninsured and underinsured and may result in decreased access to physicians for uninsured persons.

Setting
The 1996-1997 Community Tracking Study physician survey.

Main Outcome Measure
The number of hours in the month prior to the interview that the physician provided care for free or at reduced fees because of the financial need of the patient.

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community in which they practice, we examine the level of managed care in physician practice as well as managed care penetration at the market level. We also consider other important characteristics of physician practice, including practice arrangements and whether the physician owns his or her practice.

METHODS

Data Source

The data for this study are from the Community Tracking Study physician survey conducted in 1996 and 1997. The survey was designed to be representative of direct patient care physicians in the continental United States, as well as in selected communities or sites. The first stage of sample selection involved the selection of 60 sites.

The 60 sites were selected with probability in proportion to population to ensure representation of all US physicians and were also stratified to ensure diversity by region and size. The sample of physicians for each of the 60 sites was randomly drawn from the American Medical Association (AMA) and the American Osteopathic Association Masterfiles. The sample includes active non-federal office- and hospital-based physicians in selected specialties who spend at least 20 hours per week in direct patient care. While primary care physicians were oversampled, radiologists, anesthesiologists, pathologists, and a few nonpatient care specialists (eg, legal medicine) were excluded. Residents and fellows were also excluded. The average length of the telephone interview was 20 minutes.

A total of 10,881 physicians in the 60 sites completed the survey between August 1996 and August 1997. These physicians constitute an overall response rate of 65%. Physicians practicing in certain types of settings were excluded from this analysis, including those employed by medical schools, government-owned facilities, federally funded community health centers, and industrial clinics. These physicians were excluded either because the issue of charity care is not particularly relevant (in the case of industrial clinics) or because these facilities have an explicit mission to serve the medically indigent and they receive public subsidies to do so. After these exclusions, the total sample of physicians for this study was 9871.

All estimates presented in this article were weighted to be representative of all nonfederal patient care physicians in the continental United States. Weights were constructed to allow nationally representative estimates to be produced from the 60 sites and to restore proportionality to the sample arising from survey nonresponse, the clustering of the sample into 60 sites, and oversampling of primary care physicians. The weights were explicitly adjusted to reflect the distribution of physicians by age and specialty for the nation as well as for each site, based on the AMA Masterfile. All estimates were produced using the SUDAAN software package, which also adjusts the SEs of estimates to take into account the complex sample design.

Dependent Variable

During the interview, physicians were asked the following question: “During the last month, how many hours, if any, did you spend providing charity care? By this we mean, that because of the financial need of the patient you charged either no fee or a reduced fee. Please do not include time spent providing services for which you expected, but did not receive payment (ie, bad debt).”

This question was derived from the AMA Socioeconomic Monitoring System survey, although estimates of charity care are not directly comparable because the 2 surveys use different reference periods when asking about charity care.

Independent Variables

The extent of managed care involvement was measured as the percentage of total practice revenue derived from managed care plans. In the survey, managed care was defined to include plans such as health maintenance organizations (HMOs), preferred provider organizations, independent practice associations, and point-of-service plans, including Medicare and Medicaid managed care plans. This also includes managed care revenue received by physicians who treat patients on an out-of-network basis. The percentage distribution of the weighted sample of physicians by percentage of practice revenue from managed care plans is shown in Table 1. The average percentage of revenue from managed care contracts for all physicians—44%—is identical to the estimate for 1997 from the AMA Socioeconomic Monitoring System survey.

Managed care penetration at the site level was measured by computing a weighted average for each site of the percentage of physicians’ total practice revenue from managed care plans and then merging the site-level averages onto the sample of physicians. This measure is highly correlated with the more commonly used “HMO penetration” measure (which refers to the percentage of persons at the site enrolled in HMOs) developed by InterStudy and is used in this study because it is a more direct indicator of “financial pressure” in the market. The distribution of the weighted physician sample by managed care penetration at the site level is shown in Table 1.

The analysis also controls for a wide range of physician, practice, and other factors.
market characteristics that are likely to be associated with physician charity care. A combined measure for type and size of organization is included, which classifies practices as solo or 2-physician practices, group practices with 3 to 10 physicians, group practices with 11 to 50 physicians, group practices with 50 physicians or more, staff and group model HMOs, physicians employed by hospitals, and others (eg, freestanding clinics and urgent care centers). A question on whether the physician was a full or part owner of his or her practice was asked separately from the questions about practice arrangements and is also included in the analysis.

Other practice characteristics include whether the practice accepts any new privately insured or Medicaid patients, percentage of revenue from Medicaid patients, physician's income relative to hours worked, and hours spent providing patient care in the previous week. A dichotomous variable, whether the physician practiced medicine throughout the preceding year, was also included because some information (eg, annual income) only reflects part of the preceding year for physicians who were not practicing the entire year. Variables are also included for sex, years of practice, board certification, and whether the physician is an international medical graduate. Specialty categories are identified as family practice, general internal medicine, general pediatrics, medical specialties, and surgical specialties.

Market measures were used to control for the variation in the (potential) demand for and supply of charity care. The percentage uninsured at the site (derived from the Community Tracking Study household survey) is used as a measure of the demand for charity care, while supply measures include the number of public hospital beds, teaching hospital beds, and hospital emergency departments at the site (all obtained from the 1996 American Hospital Association Annual Survey). These measures were standardized relative to the number of uninsured persons at the site. It was not possible to fully assess the effects of all traditional safety net providers—including community health centers and local health departments—on physician charity care because of the lack of data. The number of nonfederal physicians per capita at the site was also included.

Analysis

We initially separated the decision to provide any charity care from the amount of charity care physicians provide, given that they provide any. Logistic regression was used to estimate the likelihood of providing any charity care, while ordinary least squares (OLS) regression was used to estimate the log of the number of hours spent providing charity care (given that physicians provided any). Log hours were used because of the highly skewed distribution of charity care hours. To account for some nonlinearity in the relationship between managed care revenue and charity care, binary variables representing different levels of practice revenue from managed care were used in both regressions. However, a continuous measure of managed care penetration at the site level was used because initial tests indicated that this association was strictly linear.

We then derived expected values from the 2 regression equations to summarize the effects of managed care on physician charity care provision. To do this, predicted values for the probability of providing any charity care (based on the logistic regression) were computed for the various levels of managed care revenue at the practice level and site level. For physicians who provided any charity care, predicted values for the number of charity care hours by level of managed care revenue (practice and site level) were computed from the OLS regression. Because the OLS regressions were based on the log of the number of charity care hours, it was necessary to “untransform” the predicted values back to their original scale. Because untransformed values may be biased and inconsistent with the original scale, a “smearing factor” based on the exponentiated mean of the regression residuals was used to adjust the predicted values of charity care hours. Although the smearing factor itself may be biased when the residuals are heteroscedastic, tests indicated that this was not a problem with respect to managed care revenue.

Expected values for total charity care hours were then obtained by computing the product of the 2 individual predictions for each level of managed care revenue (practice and site level).

RESULTS

Overall, 77.3% of physicians in our study provided some charity care in the month prior to the interview (data not shown). Physicians who provided some charity care spent an average of 10.3 hours on charity care. The regression results show that physicians with the heaviest level of involvement with managed care plans are significantly less likely to provide any charity care (Table 2, column 1) and provide fewer hours of charity care (column 2) compared with physicians with only 1% to 20% of practice revenue from managed care (P < .01). However, physicians with 0% of revenue from managed care were less likely to provide charity care than physicians who derived some revenue from managed care plans (P < .01). On the other hand, for those physicians who provided some charity care, those with no involvement with managed care provided the highest number of hours. In addition, higher managed care penetration at the site level was associated with fewer charity care hours (P < .01), but did not have statistically significant effects on the likelihood of providing charity care.

The results also show that practice arrangements and ownership are significantly related to charity care. The odds of providing charity care for physicians in medium and large group practices were about two thirds that of physicians in solo and 2-physician practices (P < .01), while the odds of providing charity care for physicians in staff and group model HMOs were only about one third that of physicians in solo and 2-physician practices (P < .01). For physicians who provided some charity care, those in large group practices and staff or group model HMOs provided fewer hours than physicians in solo and 2-physician practices (P < .01 and P < .05, respectively).
Physicians who are full or part owners of their practice are 1.9 times more likely to provide charity care than nonowners (P < .01), although ownership does not have any independent effects on the number of charity care hours provided.

General internists, pediatricians, and medical specialists were less likely to provide charity care relative to family practitioners and surgical specialists (P < .01), while medical and surgical specialists provided the highest number of charity care hours (P < .01). Male sex, board certification, and fewer years in practice were all significantly associated with a higher likelihood of charity care provision, but had no significant effects on the number of charity care hours. Physicians with closed practices—to privately insured, Medicare, and Medicaid patients—were less likely to provide charity care (P < .05 and P < .01, respectively). Physicians who derived a high percentage of their practice revenue from Medicaid were less likely to provide any charity care (P < .05), but provided more hours of charity care if they provided any (P < .01). Both the likelihood and amount of charity care provision decreased as the hourly wage increased (P < .01).

Physicians provided somewhat fewer hours of charity care in areas that had relatively more public hospitals (P < .05) and hospital emergency departments (P < .01). On the other hand, physicians in areas with a large number of teaching hospitals were more likely to provide charity care (P < .05) and more hours of charity care (P < .01) vs physicians in areas with fewer teaching hospitals. Physicians also tended to provide more charity care in areas with a relatively higher number of physicians (P < .01).

**TABLE 3** shows the results for the expected overall number of charity care hours that were derived from the logistic and OLS regressions. The results show that fewer hours of charity care are provided by physicians in practices that derive a larger percentage of their revenue from managed care, as well as by physicians who practice in sites with high managed care penetration. Across all levels of managed care penetration at the site level, physicians who derive 85% or more

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**Table 2. Regression Results for the Likelihood of Providing Any Charity Care and the Log of the Number of Charity Care Hours for Physicians Who Provide Any**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Likelihood of Providing Any Charity Care, Odds Ratio (95% CI)†</th>
<th>Log of Hours Spent Providing Charity Care, Coefficient (95% CI)‡</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>3.06 (1.00 to 9.39)</td>
<td>0.90 (0.47 to 1.34)</td>
</tr>
<tr>
<td>MC revenue in physicians’ practice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No MC revenue</td>
<td>0.57 (0.44 to 0.75)†</td>
<td>0.30 (0.13 to 0.48)†</td>
</tr>
<tr>
<td>MC revenue = 21%-40% of total revenue</td>
<td>0.94 (0.81 to 1.09)</td>
<td>−0.07 (−0.13 to −0.02)†</td>
</tr>
<tr>
<td>MC revenue = 41%-60% of total revenue</td>
<td>0.89 (0.76 to 1.04)</td>
<td>−0.10 (−0.18 to −0.02)†</td>
</tr>
<tr>
<td>MC revenue = 61%-84% of total revenue</td>
<td>0.78 (0.65 to 0.92)§</td>
<td>−0.05 (−0.13 to 0.03)§</td>
</tr>
<tr>
<td>MC revenue ≥85% of total revenue</td>
<td>0.41 (0.32 to 0.52)§</td>
<td>−0.25 (−0.38 to −0.13)§</td>
</tr>
<tr>
<td>Average % of revenue from MC at site (±1 SD)</td>
<td>0.95 (0.86 to 1.05)§</td>
<td>−0.06 (−0.09 to −0.02)§</td>
</tr>
</tbody>
</table>

Practice arrangement: Group practice, 3-10 physicians | 0.83 (0.72 to 0.96)§ | −0.10 (−0.17 to −0.04)§ |
| Group practice, 11-50 physicians | 0.67 (0.55 to 0.80)§ | −0.08 (−0.18 to 0.02) § |
| Group practice, >50 physicians | 0.67 (0.51 to 0.90)§ | −0.26 (−0.38 to −0.14)§ |
| Staff or group model HMO | 0.36 (0.28 to 0.45)§ | −0.17 (−0.33 to −0.02)§ |
| Hospital-based practice | 0.70 (0.56 to 0.89)§ | 0.02 (−0.09 to 0.13) § |
| Other | 0.66 (0.54 to 0.80)§ | 0.10 (−0.04 to 0.25) § |

Other practice characteristics: Physician is full or part owner | 1.88 (1.61 to 2.19)§ | −0.00 (−0.08 to 0.08) § |
| Not accepting new Medicare or privately insured patients | 0.64 (0.44 to 0.92)§ | 0.12 (−0.09 to 0.32) § |
| Not accepting new Medicaid patients | 0.82 (0.71 to 0.94)§ | −0.08 (−0.15 to −0.02)§ |
| % of practice revenue from Medicaid (±1 SD) | 0.93 (0.88 to 0.96)§ | 0.08 (0.05 to 0.11) § |
| Practiced only part of the year | 0.18 (0.07 to 0.42)§ | −0.20 (−0.61 to 0.20) § |
| Log of the No. of hours in last week that physician practiced (±1 SD) | 1.12 (1.06 to 1.18)§ | 0.13 (0.11 to 0.16) § |
| Log of hourly wage (+1 SD) | 0.86 (0.81 to 0.92)§ | −0.09 (−0.12 to −0.07)§ |

Other characteristics of physician: Male | 1.18 (1.03 to 1.35)¶ | 0.06 (−0.01 to 0.13) § |
| International medical graduate | 1.13 (1.03 to 1.36)§ | 0.05 (−0.03 to 0.13) § |
| Board certified or eligible | 1.35 (1.03 to 1.78)§ | −0.03 (−0.15 to 0.09) § |
| Years of practice | 0.98 (0.97 to 0.99)§ | 0.01 (−0.02 to 0.04) § |

Specialty: General internist | 0.69 (0.58 to 0.82)§ | 0.05 (−0.02 to 0.12) § |
| General pediatrician | 0.61 (0.51 to 0.74)§ | −0.12 (−0.21 to −0.04)§ |
| Medical specialist | 0.80 (0.67 to 0.95)§ | 0.35 (0.28 to 0.42)§ |
| Surgical specialist | 1.07 (0.86 to 1.34)§ | 0.44 (0.36 to 0.53)§ |

Other site-level variables: % Uninsured | 1.10 (1.08 to 1.23)¶ | 0.02 (−0.02 to 0.06) § |
| No. of public hospital beds per 10,000 uninsured persons | 0.98 (0.89 to 1.06)§ | −0.03 (−0.06 to −0.00)§ |
| No. of teaching hospital beds per 10,000 uninsured persons | 1.10 (1.00 to 1.20)¶ | 0.06 (0.02 to 0.09)§ |
| No. of hospital emergency departments per 10,000 uninsured persons | 0.95 (0.83 to 1.01)§ | −0.08 (−0.13 to −0.02)§ |
| No. of physicians per capita | 1.01 (0.95 to 1.07)§ | 0.05 (0.01 to 0.08)§ |

Size of area: Small metropolitan area (<200,000 persons) | 0.90 (0.63 to 1.30)§ | 0.08 (−0.06 to 0.22) § |
| Nonmetropolitan area | 1.19 (0.73 to 1.93)§ | 0.06 (−0.10 to 0.21) § |

*Data are from the Community Tracking Study physician survey, 1996-1997. Charity care refers to care provided for free or for a reduced fee because of the financial need of the patient in the month prior to the interview. CI indicates confidence interval; MC, managed care; and HMO, health maintenance organization.†Based on logistic regression analysis.‡Based on ordinary least squares regression. The sample was restricted to physicians who provided any charity care.¶Reference category is MC revenue = 1% to 20% of total revenue.§Statistically significant at .05 level.**Reference group is family practice.††Odds ratios reflect a 1-SD increase.‡‡Reference category is large metropolitan area.
of total practice revenue from managed care provide about half as much charity care as physicians who derive no revenue from managed care and about 40% less than physicians who derive 1% to 20% of practice revenue from managed care. However, there is very little difference between physicians with 21% to 40%, 41% to 60%, and 61% to 84% of practice revenue from managed care. Thus, differences in overall charity care provision occur primarily at the 2 extremes of managed care involvement.

Regardless of the physician’s level of involvement with managed care, those who practice in areas with high managed care penetration (defined as 2 SDs above the average for all sites) provide about 25% fewer hours of charity care than physicians who practice in areas with low managed care penetration (defined as 2 SDs below the average), although the differences by level of managed care penetration in the market appear smaller than differences in charity care based on physician’s practice revenue.

**COMMENT**

Our results suggest that physicians who are more heavily involved with managed care plans and who practice in markets with high managed care penetration provide less charity care, perhaps because greater financial pressures limit their ability to cross-subsidize care for the medically indigent by shifting the costs onto third-party payers. However, it is important to point out that this explanation would reflect an unintended consequence of the more aggressive cost-control methods used by managed care plans, rather than explicit and direct attempts by managed care plans to limit charity care provision. In other words, any type of cost control (whether arising from the private market or public policy decisions) could result in the same behavioral response by physicians.

It is also important to note that the causal mechanism attributed to these results—financial pressure—was not measured directly in this study. Furthermore, because the study was based on cross-sectional rather than longitudinal data, the results do not allow us to conclude with certainty that an increase in managed care over time is resulting in a decrease of physician charity care. Therefore, alternative explanations for these findings need to be considered.

It is possible that because managed care plans typically have lower deductibles and other copayments, physicians who are heavily involved with managed care plans see fewer underinsured patients. However, it is likely that much of the unpaid copayments and deductibles are considered bad debt, which was explicitly excluded from our charity care measure. Also, any reductions in charity care because of lower copayments may be offset by more frequent delays or denials of care because of the stricter utilization controls used by managed care plans.

The findings relating to managed care at the practice level may reflect some self-selection on the part of physicians. Given that charity care comprises a very small amount of a physician’s practice (an average of about 5% of total practice hours), we believe it unlikely that physicians in our study sample make major decisions about their practice arrangements and revenue sources based on how much charity care they want to provide. It is also possible that physicians self-select into practices with different levels of managed care and charity care based on other criteria, and the results reflect this “sorting” rather than the direct effects of managed care per se. However, the type of practice and a wide range of other physician and practice characteristics were controlled for in the analysis, and the results for the effects of managed care revenue were highly robust and did not change when these other variables were included in the regressions. Nevertheless, we cannot rule out the possibility that there is some self-selection or sorting based on other criteria not explicitly controlled for.

A recent analysis suggests that because physicians who served a higher number of uninsured persons were more likely to be denied contracts with managed care plans, these plans make decisions about which physicians to contract with or which markets to move into heavily based in part on how much charity care physicians provide. While our survey did not include questions on terminations or denial of contracts with managed care plans, our data show that physicians who provide a lot of charity care do not have significantly fewer contracts with managed care plans than physicians who provide less. Also, it is unclear why the relatively small amount of charity care provided by an individual physician would be a major concern to managed care plans or how plans would even know the extent of charity care being provided given the lack of data on charity care.

One exception to the general trend was that the small group of physicians who did not have any involvement with managed care plans were less likely to pro-

**Table 3. Expected Number of Hours Spent Providing Charity Care in the Previous Month**

<table>
<thead>
<tr>
<th>% of Physician’s Practice Revenue Derived From Managed Care</th>
<th>Managed Care Penetration at the Site Level†</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Low</td>
</tr>
<tr>
<td>1-20</td>
<td>9.4</td>
</tr>
<tr>
<td>21-40</td>
<td>8.6</td>
</tr>
<tr>
<td>41-60</td>
<td>8.3</td>
</tr>
<tr>
<td>61-84</td>
<td>8.5</td>
</tr>
<tr>
<td>≥85</td>
<td>5.8</td>
</tr>
</tbody>
</table>

*Data are from the Community Tracking Study physician survey, 1996–1997. Expected values are derived from the logistic regression analysis and the ordinary least squares regression analysis (Table 2). The predicted values from the logistic regression equation were transformed back to the original scale to produce predicted probabilities of providing charity care, while the predictions from the weighted least squares regressions (based on the log of the number of charity care hours) were transformed back to their original scale using a smearing method to produce the predicted number of charity care hours. For each cell in this table, the predicted probability was multiplied with the predicted number of charity care hours to derive the overall average number of charity care hours.

†Defined as the percentage of revenue from all managed care plans averaged across all physicians at a given site. Average managed care penetration reflects the mean for all sites, low managed care penetration is based on 2 SDs below the mean, and high managed care penetration is based on 2 SDs above the mean.
provide any charity care than physicians with some managed care involvement, although those who do provide some charity care tend to provide more than physicians who are involved with managed care. Additional analysis showed that these physicians have been practicing longer, are much more likely to be in solo practice, work fewer hours, have lower incomes, and are more likely to have closed practices than other physicians in our sample. It is possible that some of these physicians prefer to keep their practices small and exclusive, are highly selective about the patients they see, and would prefer to avoid potential complications arising from managed care and patients who lack the ability to pay.

Other findings also illustrate the potential effects of health system changes on charity care, particularly the increasing number of physicians affiliated with larger and more formally organized groups. Charity care provision tends to be greater in solo practices or small groups where physicians own all or part of their practice. It is possible that physicians in larger group practices provide less charity care because the larger and more formal structures of these settings intentionally or unintentionally result in greater organizational barriers. In addition, “employed” physicians may have less autonomy and discretion in treating medically indigent patients.

The results show that the relative number of uninsured persons in a community (as a measure of the demand for charity care) is not significantly related to physician charity care, although it is possible that the level of aggregation for the measure (based on entire metropolitan and nonmetropolitan areas) was too large to detect any significant effects. Physician charity care may be more affected by the level of demand closer to their own practice (e.g., the neighborhood).

While findings for the effects of traditional safety net providers on physician charity care are incomplete because of the absence of data on community health centers and other free clinics, the results do show that physicians tend to provide more charity care in areas with relatively fewer public hospitals or hospital emergency departments, which suggests that physicians do pick up some of the extra demand for indigent care in areas where these providers are less prevalent. On the other hand, physicians tend to provide more charity care in areas with a relatively large number of teaching hospitals. Teaching hospitals may have considerable influence with the physician community in areas where they are highly prevalent, and this may help to encourage more of a community-wide commitment to provide care to the medically indigent.

Nevertheless, if cost pressures do result in less charity care provision by physicians, an additional consequence is that more of the burden of providing indigent care could be shifted onto the major safety net providers, many of whom are also struggling financially because of health system changes. Increases in the number of uninsured persons they serve would severely strain their already limited resources for indigent care, which could result in a reduction or rationing of this kind of care. Thus, a significantly decreased role in serving the uninsured by private practice physicians could negatively affect access to care for the uninsured directly, as well as indirectly because of the increased burden on an already fragile safety net.

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**REFERENCES**


tions, researchers can further establish the value of agenda setting as a core communication skill.

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Osler Maneuver to Detect Pseudohypertension

To the Editor: Dr Chae and colleagues1 evaluated increased pulse pressure as an independent risk of congestive heart failure in the elderly. However, the authors did not mention the use of the Osler maneuver to differentiate true hypertension from pseudohypertension. In pseudohypertension the cuff blood pressure is inappropriately higher than the true intra-arterial pressure because of excessive arteriosclerosis common in the elderly.2,3

Although Osler4 described this phenomenon in 1892, it was Messerli et al2 who in 1985 proposed the term “Osler’s maneuver” for the clinical detection of pseudohypertension. The Osler maneuver is performed by palpating the pulseless radial or brachial artery distal to the point of occlusion of the artery by the sphygmomanometric cuff. When either of these arteries remains palpable (despite being pulseless), the patient is described as “Osler positive.” In contrast, when either artery collapses and becomes impalpable, the patient is “Osler negative.”

In the study reported by Messerli et al,2 the patients with a positive Osler maneuver had falsely elevated blood pressure readings, with a difference of 10 to 54 mm Hg between cuff and true intra-arterial pressures.3 Thus, depending on the number of Osler-positive patients vs Osler-negative patients in the study reported by Chae et al,1 the results and the conclusion could be markedly different from those presented.

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In Reply: Dr Cheng notes that the Osler maneuver was not performed on the participants in our study. Pseudohypertension and the elevation in pulse pressure that occur with aging both reflect the underlying pathology of progressive arteriosclerosis and stiffening of the arteries with age. In fact, Messerli and colleagues1 found that arterial compliance, as measured by pulse wave velocity and pressure decay index, was markedly increased in subjects who were Osler positive. Furthermore, in the Osler-positive patients, the systolic and diastolic pressures measured by sphygmomanometry were both about 16 mm Hg higher than the true intra-arterial pressure.1 This resulted in falsely elevated mean arterial pressures but did not affect pulse pressure. Therefore, we would not anticipate that the importance of pulse pressure in our study would be altered by whether subjects were Osler positive or negative. Indeed, these observations would lend further support to the advantages of pulse pressure in providing additional useful prognostic information.

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CORRECTION

Incorrect Wording in Abstract: In the Original Contribution entitled “Managed Care and Physicians’ Provision of Charity Care” published in the March 24/31, 1999, issue of THE JOURNAL (1999;281:1087-1092), an error occurred in the abstract on page 1087. The first sentence of the Results section should have read, “Overall, 77.3% of respondents provided an average of 10.3 hours of charity care per month.”