Community Volunteerism of US Physicians

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BACKGROUND: Many physicians and professional leaders agree that community participation is an important professional role for physicians. Volunteerism has also received increasing attention in the national agenda for social change. Yet little is known about physicians' community volunteer activities.

OBJECTIVE: To measure levels of community volunteerism among US physicians.

DESIGN AND PARTICIPANTS: Analysis of the 2003 Current Population Survey (CPS) Volunteer Supplement, a cross-sectional, nationally-representative, inperson and telephone survey of 84,077 adult citizens, including 316 physicians.

MEASUREMENTS: The primary outcome was whether the respondent had volunteered in the prior 12 months and if so the total number of hours. The level of community volunteer activity was compared between physicians, lawyers and the general public. In addition, predictors of physician volunteerism were identified.

RESULTS: According to the survey, 39% of physicians had volunteered in their community in the past 12 months compared to 30% of the general public (p= 0.002) and 57% of lawyers (p<0.001). After multivariate adjustment, physicians were half as likely as the general public (OR=0.52, p<0.001) or lawyers (OR= 0.44, p<0.001) to have volunteered. Physicians were more likely to have volunteered if they worked part-time (OR=3.35, p=0.03), variable hours (OR=3.16, p=0.03), or between 45-54 hours per week (OR=3.15, p=0.02) compared to a 35-44 hour work week.

CONCLUSIONS: Despite highly favorable physician attitudes toward volunteerism in prior surveys, less than half of US physicians have volunteered with community organizations in the past year. Renewed attention to understanding and increasing physician engagement in community volunteer work is needed.

volunteerism.

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INTRODUCTION

Amid evidence of eroding social trust and reduced standing of the medical profession, many organizational leaders have issued calls for the profession to refocus its efforts on fulfilling the core tenets of medical professionalism. 1-11 Many have argued that civic participation is an important component of medical professionalism. 5-7,12 Civic participation encompasses multiple types of activities including political advocacy, philanthropic activities, and volunteer work. For physicians, volunteerism may include both charity care within their own medical practice and a broader range of community volunteer work, which may or may not be connected to their medical expertise. Both types of volunteerism are important roles for the profession. Community-based volunteerism can contribute important service and provide valuable health expertise to the public. A visible and sustained commitment to communities may also help the profession regain social trust at a time when the profession is increasingly under scrutiny. 1,8,10 Finally, community volunteerism offers opportunities for physicians to better understand the social context of health and to address social determinants of health either through advocacy or service.

Prior research on physician civic participation has largely focused on the provision of charity care services or level of political activity. 13 Research examining physician volunteerism in their communities is limited. A recent survey found that 95% of physicians rated community participation, defined as providing health related expertise to local community organizations, as important.14 However, just 54% of physicians reported volunteering in this capacity over the prior three years. This study was unable to draw comparisons with other professions or the public and employed a relatively narrow definition of volunteerism. A survey of female physicians in the early 1990s found that 45% had participated in non-medical volunteering, although the reporting period was not explicitly defined in the survey. 15 Other surveys have focused more narrowly on members of state specialty societies and are less generalizable. 16,17

The goal of this study is to assess the level of physician volunteerism compared to that of the general public and the legal profession. The comparison to the legal profession provides a metric of how physicians compare to another profession with prominent social standing. The study also explores the most common types of volunteer activities pursued, providing a richer understanding of this form of civic participation.

METHODS

We analyzed the Current Population Survey (CPS), a nationallyrepresentative, cross-sectional, in-person and telephone, household survey. The sample is a multistage stratified random sample of US households. Using sampling weights provided by the Census Bureau to account for differential probabilities of selection, representative state-level and national-level estimates can be calculated. Given this sampling design, the survey should be representative of the US population overall as well as US physicians. Interviews are conducted either in-person or by telephone depending on respondents' preferences. The CPS response rate exceeds 90% after excluding unoccupied houses from the sample frame. Further details and documentation for the CPS are available from the US Census Bureau. ^{18,19} The CPS is administered monthly by the Census Bureau to monitor labor force statistics. In September 2003 it included a special supplement assessing volunteerism in America. This supplement included 84,077 adult citizens of whom 316 were physicians and 437 were lawyers.

Dependent Variables

The CPS measures volunteerism in two ways. First, respondents are asked whether they have volunteered in the previous year ("Since September 1st of last year, have you done any volunteer activities through or for an organization?"). Second, through a series of iterative questions, subjects quantify the number of hours volunteered with all organizations in the previous year. The former is treated as a dichotomous variable in our analyses, while the latter as a continuous variable. Additional open-ended questions characterize the nature of volunteer activities including the predominant type of activity and organization.

Independent Variables

The primary independent variable in our analysis was occupation, self-reported in the CPS. We included dummy variables for physicians and lawyers with the general public as the reference group in our multivariate analyses. The CPS monthly survey collects data on a wide range of personal and household characteristics. We included age, sex, marital status, race/ ethnicity, educational attainment, employment status, income and the presence of children in the household as covariates in our analysis. We also included geographic variables for region of the country and whether the respondent lives in a metropolitan statistical area (MSA). These variables were selected for inclusion in our analysis based on previously established significant relationships with measures of civic engagement. $^{20-22}$ Average weekly hours of work were included in the analysis to account for the competing demands on time for community volunteer participation.

Analysis

We compared physician volunteerism to another classical profession, law, as well as the general public. The proportions of respondents that reported volunteering in the prior year among the three groups (physicians, lawyers, general public) were evaluated using Pearson chi-square tests. Mean hours volunteered in the prior year among the three groups were calculated and compared using one-way ANOVA. Analysis was limited to those that volunteered in the prior year and excluded those volunteering on a full-time basis (>=40 hours per week; n=117 including 3 lawyers and 0 physicians). The primary types of volunteer activities and organizations were compared

across groups using chi-square tests. Types of volunteer activities were categorized: health-related services, non-health related human services, work in support of an organization (e.g., fundraising, general labor), organizational leadership (e.g., board of directors), and other. The types of organizations were aggregated into the following categories: non-health local service, faith-based, health or health care, and advocacy or trade (e.g., county medical society).

The odds of volunteering in the previous year were estimated with multivariate logistic regression models controlling for socioeconomic characteristics (race, ethnicity, income, geography, marital status, gender, age, education, employment, child in household) and hours worked per week. Ordinary least squares regression models were used to estimate the number of hours volunteered among those that volunteered in the prior year for physicians and lawyers compared to the general public controlling for the covariates listed above. Physicians and lawyers were compared in multivariate analyses using postestimation Wald tests. Bivariate and multivariate analyses were also conducted within the physician subgroup (n=316) to identify the demographic and practice characteristics associated with volunteering.

We conducted our analysis using Stata version 9 (College Station, TX). Sampling weights were used to account for the complex sampling design and differential probabilities of selection. Statistical significance was pre-specified with a two-tailed test below the 0.05 level.

RESULTS

The weighted descriptive statistics describing the survey respondents are presented in Table 1. As expected, physicians and lawyers had higher levels of income and education and were more likely to be married, male, Caucasian, employed and living in urban areas (MSAs) than the general population. Physicians reported longer work hours compared to lawyers and the general public.

Overall Volunteerism

Less than half of physicians (38.8%) reported volunteering in the prior year, more than the general public (30.0%, p=0.002) but significantly less than lawyers (57.0%, p<0.001). (Table 2) Among respondents with a graduate school or professional degree and incomes greater than \$75,000 per year, 55.9% of the general public reported volunteering compared to 39.4% of physicians (p<0.001). When further limiting this analysis to those working 55 hours or more per week, 61.0% of the general public reported volunteering compared to 34.5% of physicians (p<0.001). Among those that volunteered, physicians reported volunteering a similar number of hours in the prior year compared to the general public (105.7 vs. 122.0; p=0.19) and lawyers (105.7 vs. 106.9; p=0.94).

After multivariate adjustment, physicians were half as likely as the general public (OR=0.52, p<0.001) or lawyers (OR=0.44, p<0.001) to have volunteered in the prior twelve months. The greater difference between physicians and other groups after adjustment is largely attributable to controlling for the higher level of socioeconomic status (SES) among physicians given that SES is highly correlated with volunteerism (rates among those with and without a graduate degree: 54.0% vs.

Table 1. Weighted Characteristics of Survey Respondents

Characteristic	Doctors	Lawyers	General public	P-Value*
	(n=316)	(n=437)	(n = 83,324)	
Median Age (IQR)	44 (37–52)	45 (35–55)	46 (33–60)	0.69
Female (%)	27.7	29.1	52.5	< 0.001
Married (%)	78.7	71.1	56.5	< 0.001
Non-rural residence (%)	92.2	95.7	80.2	< 0.001
Children in	55.4	48.0	40.3	< 0.001
household (%)				
Employed (%)	99.0	97.5	63.4	< 0.001
Race/Ethnicity (%)				< 0.001
White	81.3	90.9	75.4	
African-American	2.2	3.0	11.6	
Native American	0.0	0.0	0.005	
Asian-American	13.0	2.3	3.0	
Hispanic	3.5	3.3	8.1	
Region (%)				< 0.001
Northeast	31.3	25.1	19.3	
Midwest	19.2	23.6	23.8	
South	26.9	26.4	35.9	
West	22.6	24.9	21.1	
Income (%)				< 0.001
<\$20,000	0.3	3.0	15.5	
\$20,000-\$34,999	2.1	3.1	16.5	
\$35,000-\$49,999	4.6	3.3	13.3	
\$50,000-\$74,999	5.4	8.0	17.5	
>\$75,000	74.9	70.7	22.1	
Missing	12.8	11.9	15.2	
Hours worked per week (%)				<0.001
0-34 hours	9.0	6.8	9.1	
35-44 hours	15.6	33.2	35.1	
45-54 hours	19.4	31.5	8.1	
>54 hours	39.2	16.3	5.0	
Variable work hours	15.9	9.9	6.1	
Unemployed	1.0	2.5	36.6	
Education (%)				< 0.001
High school or Less	0.0	0.0	46.6	
Some college	0.0	0.0	28.2	
Bachelors degree	0.0	0.0	17.5	
Graduate degree	100.0	100.0	7.7	

 $^{^*}$ Chi-squared tests except age where the Kruskal–Wallis test was used

29.5%, p<0.001). In a multivariate analysis of volunteers, physicians volunteered on average 29.8 fewer hours per year that the general population (p<0.02) but a similar level compared to lawyers (p=0.93).

Volunteer Activities

Bivariate results describing the types of volunteer activities most frequently engaged in by occupation are presented in Table 3. Physician volunteer activities were relatively equally distributed across the five categories. Physicians were much more likely to provide health-related services than lawyers or the general public. Lawyers and physicians were much more likely to serve in a leadership capacity (board or management position) than the general public. Very few physicians reported primarily volunteering with trade associations.

Physician Characteristics Associated with Volunteering

In bivariate analyses, older, married and rural (non-MSA) physicians were more likely to report volunteering in the prior year. Physicians in the western region of the US were the least likely to volunteer while physicians in the Midwest were most likely (Table 4). Physicians working 35–44 hours per week were less likely to have volunteered than physicians working parttime or more than 44 hours per week.

These associations held after multivariate adjustment. (Table 5) Physicians were more likely to have volunteered if they worked part-time (OR=3.35, p=0.033), variable hours (OR=3.16, p=0.034), or between 45 and 54 hours per week (OR=3.15, p=0.019) compared to a work week of 35–44 hours per week. Married physicians (OR=2.42, p=0.017) were more likely to volunteer and physicians in the western region were less likely to volunteer (OR=0.41, p=0.035).

DISCUSSION

Most physicians and professional leaders believe that in addition to providing charity care, community participation is an important role for the medical profession. Indeed, a recent survey found that nearly 95% of physicians agree with this notion. ¹⁴ Despite these favorable attitudes, we found that less than half of physicians reported volunteering in the prior year. However, those that do volunteer, do so at similar levels as the general public and lawyers. Furthermore, after adjustment for their socioeconomic standing, physicians were significantly less likely to have performed community volunteer work than the general public or members of the legal profession.

The levels of physician volunteerism in our study are somewhat lower those recently published by Gruen et al. 14

Table 2. Measures of Community Participation by Occupation

	Doctors (n=316)	Lawyers (n=437)	General public (n=83,324)	P-value: doctors vs. lawyers	P-value: doctors vs. public
Unadjusted weighted results					
Percent that volunteered in the prior year	38.8	57.0	30.0	< 0.001	0.002
Total hours colunteered in the prior year among volunteers	105.7	106.9	122.0	0.94	0.18
Adjusted weighted results*					
Odds of having volunteered in prior year	0.52 [0.40, 0.68]	1.21 [0.95, 1.54]	ref	< 0.001	< 0.001
Hours volunteered in prior year among volunteers	-29.8 [-55.5, -4.2]	-28.4 [-54.9, -1.9]	ref	0.02	0.04

^{* 95%} confidence intervals are presented below each point estimate

Table 3. Description of Community Activities Among t	hose that Volunteered
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	Doctors (n=123) %	Lawyers (n=248) %	General public (n=25,798) %	P-value
Type of volunteer activity				< 0.001
Provide non-health human services	17.0	12.8	22.6	
Support of an organization	24.3	33.4	47.9	
Provide health-related services	20.6	4.5	3.1	
Organizational leadership	26.0	30.8	10.3	
Other	12.2	18.5	16.2	
Type of organization				< 0.001
Non-health local service	33.0	65.6	53.8	
Faith-based	31.3	19.7	35.3	
Health or health care	32.7	4.0	8.4	
Advocacy or trade	3.0	10.7	2.5	

They found that 54% of physicians had volunteered in the prior three years (compared to 39% in our study). However, they inquired about volunteerism over a longer time period (3 years vs. 1 year) and employed a different definition (provide health-related expertise to a community organization) making a direct comparison of the results difficult. Our estimates are similar to those found in a survey of female physicians conducted in 1993–94 that found 45% participated in non-clinical volunteerism in a "typical week" (compared to 42% of women in our study). ¹⁵ Despite these differences, these studies all support the general conclusion that a significant proportion of physicians have not recently engaged in community-based volunteer activities.

The reasons for the relatively low level of community volunteerism among physicians are uncertain. Perhaps providing charity care in their own practices fulfills many physicians' expectations for volunteerism despite survey findings indicating physician support for broader community volunteerism. Although the percentage has been declining,

Table 4. Bivariate Associations of Physician Characteristics with Volunteering in the Prior Year (n=316)

Physician characteristics	% Volunteered in prior year	P-value	
Age		0.10	
<35	28.6		
35-50	38.4		
>50	47.5		
Sex		0.53	
Female	42.0		
Male	37.6		
Region		0.006	
Northeast	36.1		
Midwest	48.0		
South	50.1		
West	21.3		
Marital status		0.002	
Married	43.5		
Not married	21.6		
Children in household		0.19	
Yes	42.4		
No	34.4		
Hours worked per Week		0.02	
0-34	52.4		
35-44	25.7		
45-54	51.0		
>54	32.3		
Variable hours	47.7		
Metropolitan area		0.05	
MSA (non-rural)	37.2		
Non-MSA (rural)	57.7		

two-thirds of physicians continue to provide some charity medical care – three-quarters doing so primarily within their own medical practice. ²³ In addition, the nature of medicine practice and its intrinsic social value may substitute for community-based volunteer activities for which individuals in other occupations may feel a greater responsibility to engage. It is also possible that differences in the nature of pro bono legal work compared to charity medical care could account for some of the differences between physicians and lawyers. Pro bono work often occurs through organizations and is likely to be captured in our volunteerism measures whereas "charity care" may be more likely to occur within regular clinical practice and thus would not be reported. ²⁴ Lawyers may also have different professional motives to engage in volunteer activities (e.g., political or public aspirations) relative to physicians.

Another possibility is that the favorable attitudes about community participation are not deeply held convictions. While 95% of physicians express favorable attitudes, only 52% view community participation as "very important." Physicians may also be more willing to endorse volunteerism as an activity for the profession in general than for themselves in particular. It is important to understand precisely how physicians define civic participation and volunteerism and what they perceive to be their professional obligation or desired

Table 5. Multivariate Analysis of Physician Characteristics and Volunteering in the Prior Year (n=316)

	Odds ratio	CI	P-value
Age			0.19
<35	ref		
35-50	1.15	[0.54, 2.45]	0.73
>50	1.94	[0.84, 4.46]	0.12
Metropolitan area			
MSA (non-rural)	0.51	[0.20, 1.31]	0.16
Non-MSA (rural)	ref		
Region			0.01
Northeast	ref		
Midwest	1.27	[0.63, 2.57]	0.51
South	1.76	[0.85, 3.62]	0.13
West	0.41	[0.18, 0.94]	0.04
Marital status			
Married	2.42	[1.17, 5.00]	0.02
Not married	ref		
Hours worked per week			0.06
0–34	3.35	[1.10, 10.13]	0.03
35-44	ref		
45-54	3.15	[1.21, 8.20]	0.02
>54	1.67	[0.67, 4.18]	0.27
Variable hours	3.16	[1.09, 9.14]	0.03

role. Finally, it is possible that physicians substitute philanthropy for direct community volunteer work given their long work hours and relative wealth.

Interestingly, we found that physicians who work 35–44 hours per week were the least likely to volunteer and that physicians working part-time or in a modestly busy practice environment (45–54 hours) were the most likely. The reasons for this pattern are also uncertain although we did observe a similar pattern among members of the general public. Perhaps clinical practices supporting a work week of 35–44 hours are more attractive to physicians focused on personal lifestyle. Physicians in very busy practices (>54 hours per week) may face competing time demands. The greater rate of volunteerism among married physicians mirrors the association between marriage and volunteerism in the general population. 20,21

Physicians that choose to volunteer seem to be finding many avenues of civic participation. A proportion of physicians similar to the general public often volunteer through faith-based organizations. Approximately a quarter of physician volunteers report serving as an organizational leader (board of directors or management) as their primary activity, a level similar to lawyers but much higher than the general public. This is a heartening finding as organizational leadership offers one of the best opportunities for physicians to contribute their expertise and other resources to the community at-large.

Our study faces a number of limitations. We used self report of volunteer activity; however, given that volunteerism is a socially desirable activity, we might expect respondents to over report this activity lending further strength to our conclusion that a minority of physicians have recently participated in civic activities. While the study benefits from relative comparisons across social groups that may be less vulnerable to self-report bias, it is unknown whether self-report bias differs across our groups or whether differences we observed could be due simply to variable definitions of "volunteer" activities. Finally, given that the Current Population Survey was not specifically designed to study physicians, the relatively small physician sample size and the absence of data on practice characteristics limits the precision of our estimates and our ability to study a wide range of physician predictors of volunteerism.

Civic participation is important for a variety of reasons; however, for physicians and the medical profession, it offers an opportunity to provide valuable public service while projecting positively on the profession. While community volunteerism is not the only means of civic participation, it is a direct and visible way for physicians to engage in their community and may be an avenue toward enhanced social trust. If volunteerism is to be encouraged, medical schools and residency training programs can play an important role in inculcating this commitment into future physicians by providing meaningful opportunities and recognition in the clinical training years. In addition, professional medical associations could emphasize the importance of civic engagement and provide specific volunteerism opportunities.

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