



Clinical Research Study

What are the attitudes of medical students and housestaff towards health advocacy? A physician-led voter registration initiative and health advocacy survey



Robert J DeGrazia Jr^{1,*}, Serena Ogunwole¹, Ting-Jia Lorigiano¹, Jessica Bienstock¹,
Craig Evan Pollack^{1,2,3}

¹ Johns Hopkins University School of Medicine, 733 N Broadway, Baltimore, MD, USA 21205

² Johns Hopkins University Bloomberg School of Public Health, 615 N Wolfe St, Baltimore, MD, USA 21205

³ Johns Hopkins School of Nursing, 525 N Wolfe St, Baltimore, MD, USA 21205

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ABSTRACT

Background: Compared to the general population, physicians have been shown to be less engaged in civic participation and less likely to vote. However, perspectives of current trainees on health advocacy remain under-explored.

Objective: To investigate perspectives on a physician led voter registration initiative and identify current beliefs of physicians in training and medical students regarding physician health advocacy.

Design: Cross sectional survey performed at a single urban academic center.

Participants: A total of 366 medical students, residents, and fellows voluntarily participated in the survey out of a total of 1,719 available (21% response rate).

Main Measures: We examined the current perceptions surrounding health advocacy among medical students and physicians in training and how this was impacted by the COVID-19 pandemic. Responses were analyzed using Chi-square analysis and logistic regression.

Key Results: The voter registration code was scanned 131 times prior to the 2020 Presidential elections. Barriers to hospital-based voter registration included lack of time, lack of fit into the workflow and forgetting to ask. Over half of internal medicine-based residents and fellows (51%) and medical students (63%) agreed that physicians should be involved in helping patients register to vote compared to 34% of surgical-based trainees. A large majority (87%) indicated that the COVID-19 pandemic made it more necessary for physicians to be involved in politics.

Conclusion: A high proportion of medical students and housestaff across specialties report an obligation to be involved in health advocacy, though there were differing views towards direct involvement in voter registration.

Introduction

Physicians are in a unique position to directly see how government policy impacts the health of their patients, yet the role of physicians as health advocates and whether they should actively engage in social change is controversial. Physicians generally agree that advocating for individual patients is appropriate but there is a lack of consensus regarding exactly what role physicians should assume on issues that do not directly affect patient care¹. Previously, physicians have been shown to be less involved in civic responsibilities, such as voting, compared to lawyers and the general population². A 2004 survey found that 90% of physician respondents rated community participation, political involvement and collective advocacy as very important, however

only 26% acknowledged any political involvement outside of voting and only 54% provided health-related expertise to a local community organization³.

Anecdotal evidence suggests that a growing number of physicians are actively engaging in issues not directly related to patient care in recent years. High profile examples include the “this is our lane” movement after the National Rifle Association rebuked policy recommendations from the American College of Physicians, “white coats for black lives” which was started by a group of medical students in 2015 with the goal of “...recognizing racism as a threat to the health and well-being of people of color^(4,5).” During the 2020 Presidential election, physicians from Massachusetts General Hospital started the VotER Initiative through which clinicians sought to help register patients to vote.

* Corresponding author at: 2024 E Monument St 2-601.

E-mail address: RDeGrazia1@jhu.edu (R.J. DeGrazia Jr).

This initiative expanded to over 60 different medical centers across the country^{6,7}.

Despite the potentially increasing role for physician advocacy, there has not, to our knowledge, been a recent assessment of medical student and housestaff attitudes and beliefs about their role in health advocacy. This study aimed to assess the perspectives of medical students and physician house staff on the voter registration initiative at a single urban academic center and attempt to understand the attitude and beliefs of medical trainees regarding health advocacy.

Methods

The study took place at a large academic medical center in Baltimore, Maryland. After a one-month long initiative designed to increase voter registration among patients and before the 2020 Presidential election, house staff and medical students received an electronic survey. The study was deemed exempt by the Johns Hopkins School of Medicine Institutional Review Board (IRB00264808). The datasets generated during and/or analyzed during the current study are not publicly available due to it being located on a private server but are available from the corresponding author on reasonable request.

Voter registration initiative

The voter registration initiative occurred from September 9th, 2020 to October 13th, 2020, the day online voter registration ended in Maryland. Badges with a QR code that linked to the Maryland voter registration website were created that could be attached to the wearer's name badge. Badges were distributed during resident and medical student council events, as well as being left in resident and fellow lounges. Program directors for each specialty were e-mailed before the initiative with instructions regarding how to use the QR codes and general guidelines to distribute to their respective residents/fellows. These guidelines included ensuring participants remain non-partisan when asking patients to register to vote. Instructions were also in place at pick-up locations in resident/fellow lounges. We obtained information on the total number of times that the QR codes were scanned.

Perspectives on the voter registration initiative

The day after voter registration closed, a survey was e-mailed to all 1,719 medical students, residents, and fellows after the closure of the Maryland online voter registration on October 13th, 2020. The survey closed before the Presidential election on November 4th. Participants received a \$5 gift card conditional on survey completion. Learner perspectives on the voter registration initiative were assessed via five questions on our survey. Three questions assessed whether they were aware of the voter registration initiative, and if they had ever asked a patient about their voter registration status before and/or after this initiative. Responses to these questions were dichotomized as yes or no. If respondents selected "yes" they were then prompted to identify how many patients, they discussed voter registration with. Barriers to the initiative were evaluated with a multiple-choice question and, if a barrier was not listed, there was a free text option to describe the unlisted barrier. Two items were used to assess opinions surrounding voter registration. One statement indicated that "Physicians have a role registering patients to vote." The other stated "It is inappropriate for physicians to ask patients if they are registered to vote." Each response was made on a 5-point Likert scale ranging from "strongly disagree" to "strongly agree" and responses were categorized into 3 categories: agree, neutral and disagree for analysis.

Opinions on health advocacy

Five statements were used to identify opinions on health advocacy more generally including items related to physicians' responsibility to

take part in health advocacy, advocacy for individual patients, and professional identity. Three statements were used to rate whether the COVID-19 pandemic changed perspectives on their role in health advocacy. Statements were rated on a 5-point Likert scale and dichotomized as above.

Covariates

Respondents were asked their age, level of training, specialty, and political affiliation. Based on the distribution of the data, political affiliation was divided into Democrats versus Republicans and Independents. Specialties were divided into four categories including Medicine-based specialties, Surgical specialties, medical students, and other residents/fellows. Medicine-based residency consisted of Internal Medicine respondents, Pediatrics, and all sub-specialties that require Internal Medicine training. Surgical specialties included Cardiothoracic, General, Orthopedic, Pediatric, Plastic, Urologic and Vascular surgery as well as, Neurosurgery, Anesthesia and Obstetrics and Gynecology. Specialties placed in "other" included Dermatology, Emergency Medicine, Neurology, PM&R, Psychiatry, Ophthalmology, and Radiology.

Statistical analysis

The number of times the QR Codes were scanned was quantitatively tracked. We assessed perceptions of the voter registration initiative and of health advocacy overall, by political affiliation, and by specialty using Chi-squared analyses. We then performed ordinal logistic regression models where perceptions of the voter registration initiative and health advocacy were the dependent variables and specialty category was the main independent variable. Models controlled for age and political affiliation, separate models were run for each statement, and results were transformed into a predicted probability to ease interpretation. Statistical analysis was performed in Stata 16.2⁸.

Results

The QR code for the voter registration initiative was scanned 130 times by patients before the presidential election. From the 1,719 eligible medical students, residents, and fellows, a total of 366 (21.3%) responded to the survey (Table 1). Among respondents, nearly half (47.4%) were aged 26 to 30, 18.9% were medical students while 30.5% were residents or fellows from an internal medicine subspecialty. Over three quarters (76.1%) were Democrats while 4.8% were Republican.

Response to voter registration prompts

Nearly three-quarters of respondents (N=261, 71.5%) were aware of the voter registration initiative. Before this initiative, 28 (11.4%) respondents had asked a patient whether they were registered to vote. After the initiative, 52 (20.9%) indicated that they had asked a patient about their voter registration representing a 9.5 percentage point increase. Among these 52 individuals, they identified several barriers (Figure 1) to increased engagement including lack of patient interest (23%), not fitting into workflow (26%), and forgetting to ask (28%).

Perspectives on voter registration

There was significant variation in attitudes towards voter registration by training in unadjusted (appendix Table 1) and adjusted (Figure 2) analyses. Internal Medicine based respondents and medical students were the most likely to agree that physicians have a role in registering patients to vote (predicted probabilities of 55% and 56%, respectively); a lower proportion of surgical specialties respondents agreed (predicted probabilities 34%). Further, fewer Internal Medicine and medical students agreed that it was inappropriate for physicians to ask patients about being registered to vote (predicted probabilities of

Table 1
Characteristics of study population stratified by specialty category

	Medicine Based ResidencyN=98	Surgical SpecialtyN=50	Medical StudentN=53	OtherN=47	P-Value
Political Affiliation– N (%)					0.238
Democrat	82(84)	35(70)	36(76)	39(74)	
Non-Democrat	16(16)	15(30)	11(23)	14(26)	
Age Range– N (%)					<0.001
20-25	1(1)	2(4)	31(66)	1(2)	
26-30	55(56)	21(42)	12(26)	29(55)	
31-35	34(35)	23(46)	4(9)	20(38)	
36-40	8(8)	3(6)	0	3(6)	
41+	0	1(2)	0	0	

Self-reported characteristics of those who responded to the survey regarding the voter registration initiative.

Appendix table 1
Percent probability of agreeing with each statement stratified by specialty category

	Medical Student	Medicine Based Residency	Surgical Specialty	Other
<i>Perspective on Voter Initiative</i>				
Physicians have a role in registering patients to vote	63	51	34	36
It is Inappropriate for physicians to ask patients if they're registered to vote	7	18	27	27
<i>Perspective on Health Advocacy</i>				
Physicians have an obligation to focus on health advocacy	92	84	90	87
Physicians should focus on clinical care rather than health advocacy	10	22	28	25
I have a responsibility to advocate for the health and wellbeing of my patients	94	91	86	93
Being a physician advocate is an important part of my professional identity	89	77	65	74
Physicians should avoid political issues	14	13	25	40
<i>Perspective on COVID</i>				
COVID has increased the need for physicians to be involved in politics	92	84	87	83
I have an increased responsibility to participate in health advocacy due to COVID	86	79	77	64
COVID-19 has changed my perception of my role in society	49	68	72	57

Logistic regression models were used to generate predicted probabilities, adjusted for specialty, age and political affiliation with separate models for each statement. For all statements, there was a statistically significant difference to a p-value <0.05

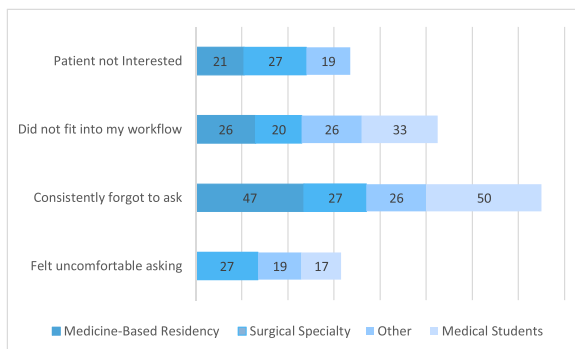


Figure 1. Percent of respondents who reported each barrier to having patient scan QR code, by specialty

18% and 7%, respectively) compared to 27% of surgical specialties. All of these findings were statistically significant to a p-value of <0.001.

Perspective on health advocacy

Responses towards perceptions of health advocacy were generally consistent across specialties (Figure 2). The majority (88%) of all respondents, regardless of specialty, agreed that physicians have an obligation to focus on health advocacy and a responsibility to advocate for the health and wellbeing of their patients. Medicine and Surgical specialties were also similar in the low levels of agreement with the statement, “Physicians should focus on clinical care rather than health advocacy” (predicted probabilities by 22% and 28%). Surgical specialties were the least likely to agree that being a physician advocate is an important part of their professional identity while medical students and Internal Medicine were the most likely (predicted probability of 65%, 89% and 77% respectively, p-value <0.001). Internal Medicine was also the least

likely to agree that physicians should generally avoid political issues (predicted probability of 13% p-value<0.001) compared to the other groups (14% for medical students, 25% for surgical specialties and 40% for other, respectively).

Perspective on COVID-19

Responses to the COVID-19 pandemic were similar across the different categories for each prompt. There was a high level of agreement among the four categories of specialty practice that the COVID-19 pandemic has increased the need for physicians to be more involved in politics. All four categories also recognized an increased sense of responsibility to participate in health advocacy since the pandemic began, with medical students having the highest predicted probability (predicted probabilities of 86%). Surgical specialties were most likely to agree that “COVID-19 has changed my perception of my role in society” while medical students were the lowest (predicted probabilities of 72% and 49%, p-value <0.001).

Perspectives stratified by political affiliation

Perceptions on voter registration, health advocacy, and changes due to COVID-19 varied by political affiliation. Democrats generally were significantly more likely to agree that there is a role for physicians to be involved in voter registration initiatives compared to non-Democrats (predicted probability of 52% vs. 26%, p-value <0.001). Democrats were also more likely to agree that physicians have an obligation and increased need to be involved in health advocacy since the start of the COVID-19 pandemic (Appendix Table 2 for adjusted analysis).

Discussion

There was consensus among physicians in training who responded to the survey that physicians have an obligation to focus on health advo-

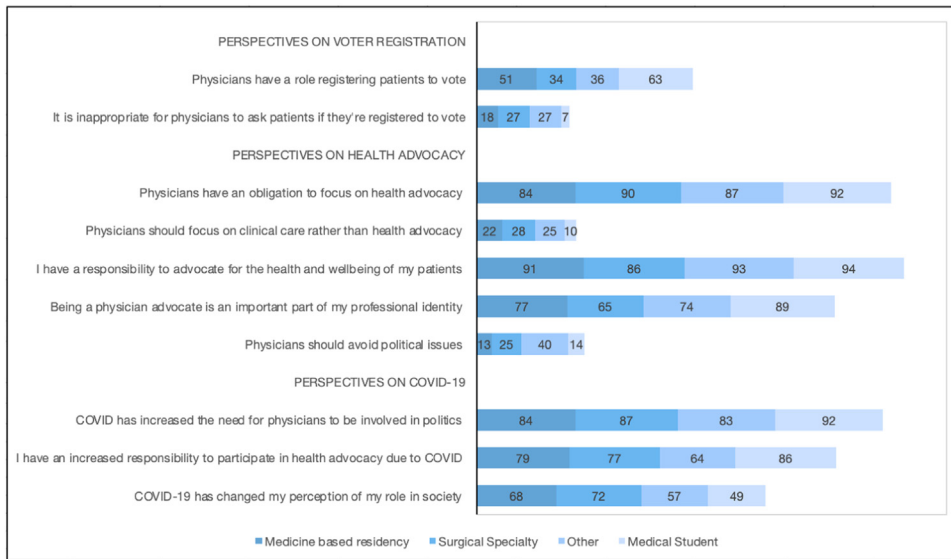


Figure 2. Predicted probability of agreeing with each statement concerning voter registration, health advocacy, and changes associated with COVID-19

Appendix Table 2 : Percent probability of agreeing with each statement stratified by political affiliation

Statement	Democrat	Non-Democrat
Perspectives on Voter Registration		
Physicians have a role registering patients to vote	52	26
It is inappropriate for physicians to ask patients if they're registered to vote	15	28
Perspectives on Health Advocacy		
Physicians have an obligation to focus on health advocacy	92	73
Physicians should focus on clinical care rather than health advocacy	16	38
I have a responsibility to advocate for the health and wellbeing on my patients	94	81
Being a physician advocate is an important part of my professional identity	82	62
Physicians should avoid political issues	17	39
Perspectives on COVID-19		
COVID has increased the need for physicians to be involved in politics	91	71
I have an increased responsibility to participate in health advocacy due to COVID	83	56
COVID-19 has changed my perception of my role in society	66	53

For all statements, there was a statistical significance in difference in agreement between Democrat and non-Democrat respondents to a p-value <0.05.

cy. Moreover, the majority of respondents indicated that the COVID-19 pandemic has also affected the way physicians in training view themselves in society and has increased the perceived need for physicians to engage in politics and advocacy. However, there was greater variation in whether physicians should be involved in helping patients register to vote with over half of internal medicine-based residents, fellows, and medical students agreeing versus only about a third of surgical-based trainees. These results underscore the importance of physician advocacy and also highlight the heterogeneity in how this may be implemented in practice and education.

Though the voter registration badges were scanned 131 times, respondents noted multiple barriers to its use including patients' lack of interest, inability to fit voter registration into workflows and consistently forgetting to ask patients. Some respondents also felt uncomfortable asking patients about their voter registration status. The workflow of physicians and physicians-in-training is already very limited. The permanent implementation of having voter registration be a part of the common vernacular of each physician would need to be diligent and thoughtfully done, including what clinical settings would be most appropriate to have these conversations with patients. Certain specialties, particularly non-surgical and non-intensive care would most likely have conversations about voter registration come up more naturally and likely more well received by patients. Further diligence and research would need to be done to determine the appropriateness in more acute settings including the intensive care units and surgical spe-

cialties. There may also be an opportunity for further development of health advocacy as a core competency in medical schools. The CanMEDs competency framework, used in Canadian medical schools has made health advocacy a key component, with the goal of developing capabilities in medical students to better address social determinants of health and health disparities⁹. The Liaison Committee on Medical Education (LCME) does already ensure that medical students in the United States are educated on socioeconomic sciences and health care disparities, however more attention may be beneficial if young physicians continue to focus on health advocacy as they have in recent years, particularly in racial disparities/racial inequality¹⁰. This is supported by recent research from Brender et al which found that 76% of allopathic medical schools that had courses publicly listed online offered at least one health advocacy course¹¹. The Accreditation Council for Graduate Medical Education Common Program Requirements that govern the structure of all residency training programs in the United States stipulate that residents must demonstrate competence in advocating for quality patient care and optimal patient care systems. Future initiatives may seek to address these barriers through additional training, for example, using mock patient interactions or role plays to help increase comfort in this area.

The differences across specialties in their opinions about voter registration warrant careful scrutiny. There are several potential explanations for these findings. First, people with different political viewpoints may self-select specific career paths¹². This is bolstered by our data in-

dicating that a lower proportion of surgeons identified as Democrats compared to medical subspecialties and is in line with differences in political affiliation noted in other studies^{12,13}. There has not been, to our knowledge, any formal research to better explain why a political polarization exists between specialties. It is possible that the training itself may lead to different political viewpoints, due to exposure to differing colleagues, patients and/or work environments. Others have revealed a positive correlation between salary and likelihood of Republican affiliation, which could suggest that either earnings (or future anticipated earnings) or some confounding factor associated with wages is associated with the likelihood of voting Republican^{14,15}.

Over three-quarters of the physicians in training identified as Democrats while only 4.8% identified as Republican. This is contrary to traditional beliefs that physicians are largely Republican. Prior to 1996, reviews of political contributions revealed that the majority of physicians who contributed to a political campaign were primarily Republican. However, there has been a steady increase in self-identified Democrats with less than 50% of physicians who made contributions to a political campaign in 2008 and 2012 identifying as Republican. This shift of the political identity for physicians is likely multi-factorial in nature but is believed to be associated with an increase in female physicians, type of employment, and specialty of the physician^{16,17}. Recent research has also revealed that the number of graduating medical students in Florida who register as Democrats has been progressively growing since 2000, while Republican registration in this same group was at its lowest point in 2010 in the last 50 years¹⁷. These findings of this study support previous reports of a growing representation of Democrats among young physicians and medical students, though these results are likely impacted by the location and type of hospital system that the survey was conducted in as physicians have been found to “ideologically sort” themselves into areas that best align with their own beliefs¹⁸. Due to the hospital system where this survey was conducted, being located in a heavily Democratic-leaning area, this could potentially drive away Republican-leaning medical students and residents. More research needs to be done in this area.

Responses from medical students were the most favorable of the voter registration initiative with the highest predictive probability of agreeing that physicians have a role registering patients to vote. Interestingly, medical students had the highest predicted probability of agreeing to the majority of questions including the change in perspectives due to the COVID-19 pandemic. Despite this heightened sense of health advocacy, medical students were similar in regard to political affiliation to the other categories and were actually less likely to self-identify as Democratic compared to Medicine-based residency respondents. These results are similar to previous findings of medical students from 16 nationally representative medical schools¹⁹.

There were several limitations to this project. First, survey respondents may be different from people who did not respond; it is possible that they may be more politically engaged or motivated leading to responder bias. Second, the generalizability of the study is limited to a single academic medical center in Maryland, a heavily Democrat-leaning state, during a particular moment in history characterized by a highly polarized Presidential campaign and during the COVID-19 pandemic. This polarization of politics and its potential effect on the roles and responsibilities of physicians is an important subject to study because of the implication it may, or may not have, on the care of patients. Third, all measures with the exception of the number of QR code scans, were self-reported and thus may be prone to social desirability and other biases that the authors were unable to eliminate from the study. Fourth, the QR codes were distributed in a uniform fashion with enough tags for each medical student, resident and fellow at this single academic institution, however the study was not able to capture how many tags were actually used. Further, the amount each QR code was scanned, who the owner of the QR code was, and who was scanning the QR code or where the QR code was scanned was not tracked. Finally, our measure of QR scans reflects how many times the code was used and does not indicate

whether the individual was able to successfully register to vote or if they did vote in the general election.

During a time of the global COVID-19 pandemic and amidst political turmoil, a high proportion of physicians in training viewed it as their responsibility to advocate for their patients and, more broadly, to be engaged in politics. Voter registration is one potential mechanism to do this, though not all physicians felt comfortable doing so, and, among those who indicated that they asked about voting, several barriers remain. Future voter registration efforts should recognize the diversity of perspectives on these issues, and, among trainees who value this form of engagement, work to address factors that impede uptake. For trainees who indicate that they would like to engage in politics but express discomfort with asking patients about voter registration, helping find other ways to impact the political process. This may include, for example, informing policy discussions and debate by sharing their experiences caring for patients.

Declaration of interests

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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