


ORIGINAL ARTICLE

Professional Partisans? Primary Care Physicians, State Governments, and COVID-19 Responsibility and Response

Kirby Goidel¹ , Timothy Callaghan², Tasmiah Nuzhath³, Julia Scobee², David Washburn⁴ and Matthew Motta²

¹Department of Political Science, Texas A&M University, College Station, TX, USA

²School of Public Health, Boston University, Boston, MA, USA

³Harvard T.H. Chan School of Public Health, Harvard University, Boston, MA, USA

⁴Health Policy and Management, Tulane University, New Orleans, LA, USA

Corresponding author: Kirby Goidel; Email: kgoidel@tamu.edu

(Received 09 January 2023; revised 02 August 2023; accepted 04 September 2023; published online 08 January 2024)

Abstract

Emerging health crises challenge and overwhelm federal political systems (Greer *et al.* 2020, *Global Public Health* 15: 1413–6). Within the context of COVID-19, states and governors took charge in the absence of a coordinated federal response. The result was uneven policy responses and variance in health-related and economic outcomes. While existing research has explored public evaluations of state COVID-19 policies, we explore primary care physicians' trust in state government for handling the pandemic, as well as their evaluations of their state government's treatment responsibility for the pandemic and their state's policy response. We find that *general* preferences for the role of the federal/state government in addressing the pandemic are shaped by individual-level physician partisanship. *Specific* evaluations of state policy responsiveness are influenced by whether physicians' partisan preferences matched their governor. We also find, however, that Republican physicians were critical of Republican governors and physicians were less partisan than the general public. At least within public health, there are limits to the influence of partisan identity on expert (physician) political evaluations.

Keywords: governors; health policy; survey research; COVID-19; political trust; partisan affiliation; primary care physicians

Introduction

Our goal in the current paper is to explore how primary care physicians (PCPs) evaluated state government efforts to manage the COVID-19 pandemic. We should

© The Author(s), 2024. Published by Cambridge University Press on behalf of the State Politics and Policy Section of the American Political Science Association. This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted re-use, distribution and reproduction, provided the original article is properly cited.

note at the outset that we are not evaluating the effectiveness of those policies directly but are instead considering how PCPs evaluated state government responsibility for the pandemic; how much trust they placed in state government and state governors to handle the pandemic; and how they evaluated the effectiveness of the state response. Theoretically, the question of how physicians evaluate state policy within the context of the COVID-19 pandemic sheds light on whether the attitudes and policy preferences of PCPs are influenced by their partisan identities (Huddy and Bankert 2017; Huddy, Mason, and Aarøe 2015). To provide context, we compare the results for our sample of PCPs with results from general population samples reflecting the views of ordinary citizens.

Studying physician policy attitudes is important, as PCPs are trusted sources for health-related information, and play an important role in communicating public health messages (Elledge *et al.* 2008; Taha, Matheson, and Anisman 2013). What PCPs tell their patients about public health initiatives (like masking and vaccination) affects individual-level compliance which, in turn, affects public health outcomes (Bhat *et al.* 2022; Clarke *et al.* 2016; Findling, Blendon, and Benson 2022; Fiscella *et al.* 2004; Gabay 2015). Second, physicians have influence, through organized groups and associations, over federal and state health policy design, passage, and implementation (Beyer and Mohideen 2008; Heaney 2006; Laugesen and Rice 2003; Oliver 2006). PCPs' attitudinal responses to state policymaking may therefore *feed back* to influence state policy (Béland 2010; Campbell 2003).

Third, and relatedly, physicians influence policy as elected representatives (Kraus and Suarez 2004; Motta 2021) and as participants in local politics on issues related to community health (Gruen, Campbell, and Blumenthal 2006). According to a 2009 study, 78% of physicians believed that they should address “societal health policy issues,” even if doing so “falls outside the scope of my professional obligations as a physician” (Antiel *et al.* 2009). In short, physicians not only believe they should play a role in the development and implementation of health policy, they often engage in advocacy, as individuals or through professional associations, on issues related to public health (Beyer and Mohideen 2008; Bonica, Rosenthal, and Rothman 2019; Contandriopoulos *et al.* 2018; Gusmano 2019; Landers and Sehgal 2000; Liepert *et al.* 2021; Weissert *et al.* 2021). In this respect, what they see, experience, and report in their individual practices as “street-level bureaucrats” helps to inform policymakers; and the decisions they make in their clinical practices can help to determine the success or failure of health policy (Harrison 2015; Keller 1999).

The role of partisan affiliation on physician evaluations

In this paper, we ask whether physicians' evaluations of state health policy are, at least in part, dependent on their partisan identity. We know well that public evaluations of state health responses to the pandemic were largely contingent on partisan affiliation (Allcott *et al.* 2020; Barrios and Hochberg 2021; Gadarian, Goodman, and Pepinsky 2021; Grossman *et al.* 2020; Makridis and Rothwell 2020; VanDusky-Allen, Utych, and Catalano 2022). Were the policy evaluations of physicians also contingent on partisan identity? Consistent with previous work on political protest and election reform, we expect that physician responses to the pandemic would be partisan (but less partisan than the general population) and asymmetrical (Hsiao and Radnitz 2021; McCarthy 2019).

The analyses that follow are built on three core premises that help to explain why this question matters. First, the lack of a coordinated and coherent federal response to the COVID-19 pandemic meant that state governments necessarily took the lead in addressing and minimizing the public health consequences of the pandemic (Birkland *et al.* 2021; Bowman and McKenzie 2020; Jacobs 2021; Knauer 2020; Warner and Zhang 2021; Weissert *et al.* 2021; Zhang and Warner 2020). Subsequently, states varied significantly in their responses to the pandemic. Variance in policy responses mostly reflected the partisan affiliation of the state's governor with Republicans adopting more relaxed or *laissez-faire* approaches and Democrats adopting more aggressive or interventionist responses (Adolph *et al.* 2021a, 2021b; Fowler, Kettler, and Witt 2020; Grossman *et al.* 2020; Kosnik and Bellas 2020; Shvetsova *et al.* 2022; Tellis, Sood, and Sood 2020; Wang, Devine, and Molina-Sieiro 2021). While these differences may reflect more general partisan preferences for activist versus limited government, they may also reflect differences in issue priorities, meaning the relative importance of public health vis-à-vis the economy. Democratic governors, by and large, prioritized public health and saw improving public health as key to maintaining the state economy. Republican governors, in contrast, prioritized the economy and sought to avoid the adverse economic consequences of lockdowns, social distancing, and mask mandates (Baccini and Brodeur 2020).

Second, PCPs are a trusted source of information about the pandemic, even if they are often “imperfect messengers” (Callaghan *et al.* 2022). Because PCPs are trusted by Democrats and Republicans alike, they have a unique ability to communicate public health directives and to encourage compliance (Findling, Blendon, and Benson 2022). PCPs also have a first-hand view of the consequences of state health policy decisions, at least to the extent that those decisions are reflected in their individual practice (e.g., through increased caseloads). Within the context of COVID-19, PCPs were often “the first stop for patients experiencing COVID-19 symptoms” (Corlette *et al.* 2021). Yet, because physicians, much like the general public, identify with one of the two major political parties in Washington (Callaghan *et al.* 2022), contribute money to political candidates (Bonica, Rosenthal, and Rothman 2014; 2015), and otherwise participate in partisan politics, they are unlikely to be immune to the effects of individual-level partisanship, an increasingly polarized political environment at the federal and state level, and partisan news media (Allcott *et al.* 2020; Druckman *et al.* 2021; Goidel *et al.* 2022; Motta, Stecula, and Farhart 2020). Indeed, previous research has linked partisan affiliation to decisions about patient care (Hersh and Goldenberg 2016) and, outside of the health policy arena, credit ratings (Kempf and Tsoutsoura 2021). In short, previous research reveals that professionals are partisan too.

Third, interest groups play an important role in state health policy, including health care industry groups, professional associations, and advocacy groups (Callaghan and Jacobs 2015; Gray, Lowery, and Benz 2013; Lowery *et al.* 2009). This includes physicians who are often seen as playing a primary, though perhaps declining, role in state health policy (Laugesen and Rice 2003). Consistent with the idea that physicians are not necessarily neutral and/or inattentive political actors, prior research finds that physicians generally believe they have responsibility to address health policy issues (Antiel *et al.* 2009). As “street-level bureaucrats,” physicians have a first-hand view of the pandemic that they can compare to public health reports. This provides insight, even if it is anecdotal, into the effectiveness of state health policy, including, for example, whether vaccine requirements and mask

mandates are reducing patient caseloads. With this in mind, we offer the following hypotheses.

H1: Physician attributions of treatment responsibility, meaning beliefs that state government should be responsible for managing the COVID-19 pandemic, will be a function of a physician's partisan affiliation but will not be dependent on which party controls the governorship.

Because this question more closely taps general ideological beliefs about the role of state government in responding to a pandemic, the partisan effects should be more muted than for our other questions. In the literature on attributions of responsibility, treatment responsibility, the responsibility for fixing a problem or condition, is often distinguished from causal responsibility, the responsibility for causing the problem in the first place (Iyengar 1989; Shields and Goidel 1998). Neither the state nor the federal government created the pandemic, but what responsibility do they have to effectively manage it? In opinion polls of the U.S. public, Republicans routinely attribute greater treatment responsibility to state governments for addressing the pandemic, while Democrats attribute greater responsibility to the federal government (Blendon, Benson, and Schneider 2021; Pears and Sydnor 2022; Pew Research Center 2020). This is consistent with prior research showing Republicans tend to prefer state government action over federal government action, and place greater trust in state governments because they are seen as closer to the people (Connolly *et al.* 2020; Uslander, 2001). Of course, attributions of responsibility to the state (versus) federal government may also depend on whether Republicans or Democrats control state government (Gomez and Wilson 2008), but because conservatives tend to place greater responsibility on state governments, these partisan effects may be muted (Rudolph 2003). Whether or not physicians are similarly-partisan in how they view the responsibility of the state and federal government for managing the COVID-19 pandemic is an open question. That is, because of ideological commitments to state government, Republican physicians may attribute no more (or less) responsibility to their state government when a Republican is governor.

Our subsequent questions more clearly and directly gauge partisan evaluations. As a result, both individual partisanship and the governor's partisanship should matter.

H2: Physician trust in state government and in the governor of the state to handle the crisis will be a function of partisan affiliation **and** which party controls the governorship.

H3: Physicians' evaluations of whether there are too many or not enough state-level restrictions on business and individuals will depend on partisan affiliation **and** the number of COVID-19 cases in the state.

H4: Physician evaluations of whether the state is doing a good job fighting the COVID-19 pandemic will depend on physician partisan affiliation **and** the partisan affiliation of the state governor. Democratic physicians will evaluate Democratic governors more positively.

Data and methods

To test these hypotheses, we administered an original online survey given to 625 PCPs in the United States. The survey was administered by the survey research firm Dynata

from May 14 to May 25, 2021. Dynata, a leading survey research firm, is routinely used in studies of health care professionals, including physicians (Finney Rutten *et al.* 2022; Hermes-DeSantis *et al.* 2021; O'Brien Pott *et al.* 2021; Schwartz *et al.* 2021; Schwartz, Osterber, and Hall 2022). Dynata selected potential survey respondents from existing panels of research participants recruited from verified lists of medical professionals. The survey was 15 minutes long and participants were provided an incentive for participating in the survey.

Of the 737 respondents initially identified by Dynata, 625 qualified for inclusion in the study as PCPs working in internal medicine, family medicine, or as a general practitioner and completed the survey.¹ We focus on PCPs because they benefit from high levels of trust with patients and can be a particularly effective and credible source for health messages encouraging compliance with public health directives. They also have a first-hand view of the pandemic as frontline health care workers.

While our sample of physicians is national in scope, it is, by definition, a non-probability sample.² Using population benchmarks from the American Medical Association Masterfile made available by the American Association of Medical Colleges, as well as income data from Wilcox (2021), we find that our sample is similar to critical population benchmarks for PCPs. Specifically, Table 1 shows that our sample approximates population benchmarks for the proportion of PCPs who are Asian, Hispanic, and for physician salary. We do see slight deviations between our sample and population benchmarks for race and gender, meaning we under-sampled Blacks and women and over-sampled Whites and men. These differences, however, are small in magnitude and, even with these limitations, our study provides data uniquely designed to investigate physician attitudes about COVID-19 in the US states.³

Dependent variables

Government responsibility for COVID-19

Each of our dependent variables address some aspect of state government performance during the pandemic. We began by examining attributions of

¹Of the 737 respondents who began the study, ten respondents worked in the medical field but were not primary care physicians while 90 potential respondents were physicians but indicated they were specialists rather than primary care physicians. For example, 25 respondents indicated they were cardiologists. Examining attitudes of specialists, such as cardiologists, is beyond the scope of the current study, but we hope will be the focus of future research.

²While a probability sample of physicians is technically feasible, given budget constraints, it was cost prohibitive. Based on our comparisons of the sample data to available national benchmarks, we have some evidence that the survey is representative. We cannot, however, be certain that the results presented here are free from the type of self-selection biases that affect non-probability samples. We discuss this a limitation in our conclusions.

³Because the data provide a reasonable approximation to national benchmarks, we did not weight the final data for the analyses included in this paper. For one, it is not clear that weighting would provide more accurate estimates, particularly in our regression models, particularly when we include controls for the variables we would use as weight Gelman (2007). Struggles with Survey Weighting and Regression Modeling. *Statistical Science*, 22(2), 153-164, 112. <https://doi.org/10.1214/088342306000000691>, Pasek (2015). When will Non-probability Surveys Mirror Probability Surveys? Considering Types of Inference and Weighting Strategies as Criteria for Correspondence. *International Journal of Public Opinion Research*, 28(2), 269-291. <https://doi.org/10.1093/ijpor/edv016>. Pasek (2015), 287), for example, concludes “no [weighting] strategy effectively improves on the raw survey data, suggesting that demographic variables alone are likely incapable of correcting for sampling differences.”

Table 1. Comparison of primary care physician sample to national benchmarks

Variable	Physician survey	National benchmark	Benchmark source
Female (<i>N</i> = 182)	30.23%	39.47%	AMA Physician Masterfile via AAMC 2018
Hispanic (<i>N</i> = 57)	9.45%	7.61%	AAMC 2018
Black (<i>N</i> = 17)	2.81%	7.31%	AAMC 2018
Asian (<i>N</i> = 136)	22.52%	21.14%	AAMC 2018
White (<i>N</i> = 409)	67.72%	61.39%	AAMC 2018
Mean income	\$200,000–249,999	\$242,000	Medscape 2021
Mean age	54	N/A	N/A

Notes. This table compares demographic characteristics from our sample of PCPs with population benchmarks for PCPs. National benchmarks for gender and race were obtained from the Association of American Medical Colleges (AAMC) publicly available physician workforce data for 2018 AAMC notes that physician sex was obtained from the AMA Physician Masterfile and that data on race was obtained from a variety of sources (American Association of Medical Colleges 2021a, 2021b, 2021c). Data on physician income was obtained from the Medscape 2021 Physician Salary Report as detailed by Wilcox (2021). Our survey data include physicians specializing in family medicine, internal medicine, and general practice; these categories were used for national benchmarks as well.

treatment responsibility for the pandemic. To answer this question, we asked respondents:

How responsible do you think each of the following should be for managing the COVID-19 pandemic?

We included options for state government and the federal government, allowing us to compare attributions of responsibility across levels of government. Responses ranged from 1 indicating not at all responsible to 4 indicating very responsible. Overall, a majority of physicians (60.9%) believed state government was “very responsible” and an additional third (32.5%) thought their state government was “somewhat responsible.” We see similar patterns in physicians’ views of federal government responsibility. Sixty-three percent of physicians believed the federal government was very responsible and 29.2% believed the federal government was somewhat responsible. These measures are highly correlated ($r = .76$) so physicians who thought the state was responsible also believed the federal government was responsible.

Trust in state government & in the state’s governor

How much trust do physicians place in their state government and, specifically, in their state’s governor to handle the COVID-19 pandemic. To address this question, we asked our sample of physicians the following question:

How much trust do you have in the following when it comes to handling the COVID-19 pandemic?

Among the targets provided were “state government” and “the governor of your state.” Responses were coded from 1 indicating “none at all” to 4 indicating “a great deal.” Overall, roughly than 1 in 5 physicians say they place “a great deal” of trust in state government (18%) or the governor of their state (20%). The modal response for these trust measures was “a fair amount.” Fifty-one percent of physicians said they trusted state government a “fair amount” while 42% said they trusted their governor a

fair amount. These measures are highly correlated ($r = 0.82$) indicating that physicians are not making strong distinctions between state government and the state governor in terms of trust in handling the pandemic.

State restrictions on businesses and individuals

How do physicians evaluate state efforts to slow the spread of COVID-19? Our survey questions address whether the state has had too many, not enough, or about the right amount of restrictions on businesses and individuals. The specific questions wording is provided below:

In its efforts to slow the spread of COVID-19, do you think your state has had too many, not enough, or about the right amount of restrictions on <businesses/ individuals>?

It is perhaps worth recalling that these questions were asked early in the pandemic in May 2021, so the timing of the evaluations would influence these evaluations. Responses are coded 1 if the respondent thought there were too many restrictions, 2 if the respondent thought there about the right amount of restrictions, and 3 if the respondent thought there were not enough restrictions. For physicians, the modal response was “about the right amount.” A majority of physicians said their state had “about the right amount” of restrictions on businesses (54.6%) and individuals (56.3%). The remainder was divided roughly equally between physicians who thought there were too many restrictions on businesses and individuals (24.3% and 19.4%) and physicians who thought there were too few restrictions (21.1% and 23.8%). These items were, not surprisingly, highly correlated ($r = 0.85$).

Evaluations of state performance

Our final dependent variable measure captures evaluations of state performance in fighting the COVID-19 pandemic. Physicians were asked their level of agreement with the following statement:

Your state government has done a good job of fighting the COVID-19 pandemic.

Responses are coded from 1 indicating strongly disagree to 4 indicating strongly agree ($M = 2.82$; $SD = 0.94$). Overall, most physicians agreed (44.6%) or strongly agreed (24.9%) that their state was doing a good job fighting COVID. A minority of physicians disagreed (18.0%) or strongly disagreed (12.5%).

In the next section of the paper, we consider the importance of physician partisanship as a predictor of attributions of responsibility, trust in state government, evaluations of state policies to limit the spread of COVID-19, and evaluations of the state’s performance in fighting the pandemic. Within this context, we also consider the relative importance of objective outcomes as measured by the number of COVID-19 cases. For the purposes of these analyses, we measure the number of COVID-19 cases in the state at the time the survey was fielded (May 17, 2021).⁴ To

⁴We use the CDC’s COVID Tracker (CDC COVID Data Tracker: Daily and Total Trends) to collect COVID cases per capital. The data are per 100,000 residents. We used 10,000 residents for visual presentation.

test our hypotheses, we ran a series of ordinal logit models regressing beliefs about state and federal responsibility for managing the crisis, trust in state government and the state's governor for handling the pandemic, evaluations of whether state restrictions on businesses and individuals were sufficient, and overall evaluations of the state's response to the COVID-19 crisis on physician's partisan affiliation, the partisan affiliation of the state's governor, and an interaction between these two measures. We also control for the effects of the number of COVID-19 cases in the state and include a set of standard demographic controls (race, ethnicity, gender, age, and income; see Callaghan *et al.* 2022) as well as a measure capturing whether a physician reported having COVID-19. In the [Supplementary material](#), we show the results are robust even after including other COVID-19-related attitudes, using a measure of COVID-19 deaths rather than cases, and estimating the models using Mixed Effects Ordinal Logistic Regression.

Results

Bivariate results

Before presenting the results of ordinal regression models, we first consider the bivariate relationships between physician partisanship and state policy attitudes controlling for the partisanship of the state's governor. We begin by examining the relationship between partisan affiliation and attributions of responsibility for handling the pandemic. As can be seen in [Figure 1](#), Democrats were more likely to believe that the federal government *and* state governments ought to be responsible for managing the pandemic, thereby offering preliminary bivariate support for H1. Republican physicians were less likely to attribute responsibility to either the state or federal government. Physician attributions of treatment responsibility for the pandemic are not influenced by which party controls the governorship. That is, the patterns are similar in states with Democratic and Republican governors. We would also note that physicians differ from the general population. In general population surveys, Republicans are more likely than Democrats to attribute responsibility to state governments while Democrats are more likely to attribute responsibility to the federal government (Blendon, Benson, and Schneider 2021; Pew Research Center 2020).

In [Figure 2](#), we present results for trust in state government and trust in the governor of the state by physician partisan affiliation and the governor's partisan affiliation. These results provide preliminary support for H2. When it comes to trust, both the individual physician's partisan affiliation and governor's partisan affiliation matter. For example, 64% of Democrats said they trusted a Democratic governor a great deal to handle the pandemic while only 16% of Republican physicians trusted a Democratic governor a great deal. In contrast, 51% of Republican physicians trusted a Republican governor a great deal compared to 24% of Democrats. Overall, despite these partisan differences, trust in state government and in the governor is lower in states with Republican governors.

In [Figure 3](#), we find preliminary, bivariate support for H3. Physician evaluations for whether a state is doing too much, about the right amount, or not enough in restricting businesses and individuals is a function of physician partisan affiliation and the governor's partisan affiliation. Overall, physicians were less likely to say there were not enough restrictions when the governor was a Democrat

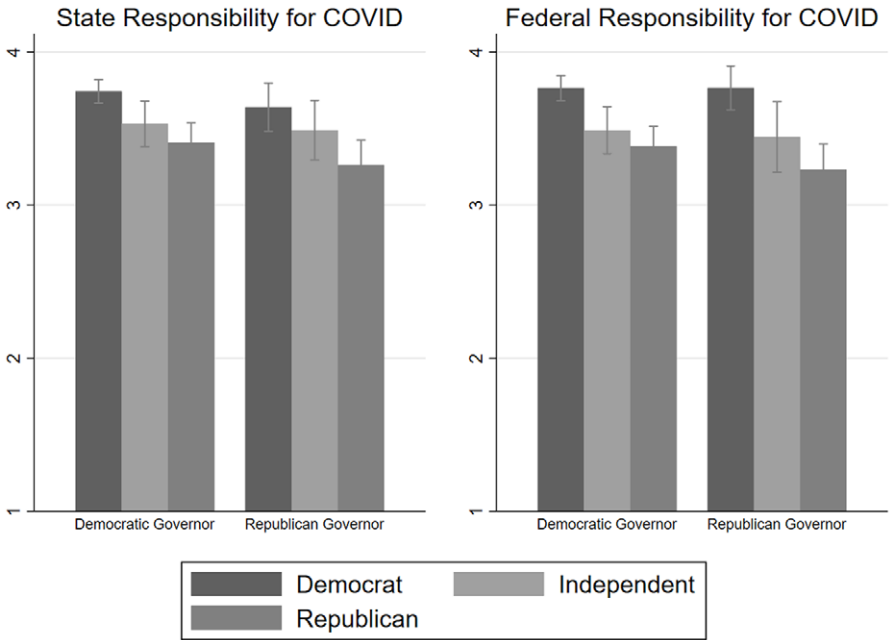


Figure 1. Physician Attributions of Responsibility to State and Federal Governments for Managing the Pandemic by Physician Partisan Affiliation and Governor's Partisan Affiliation.

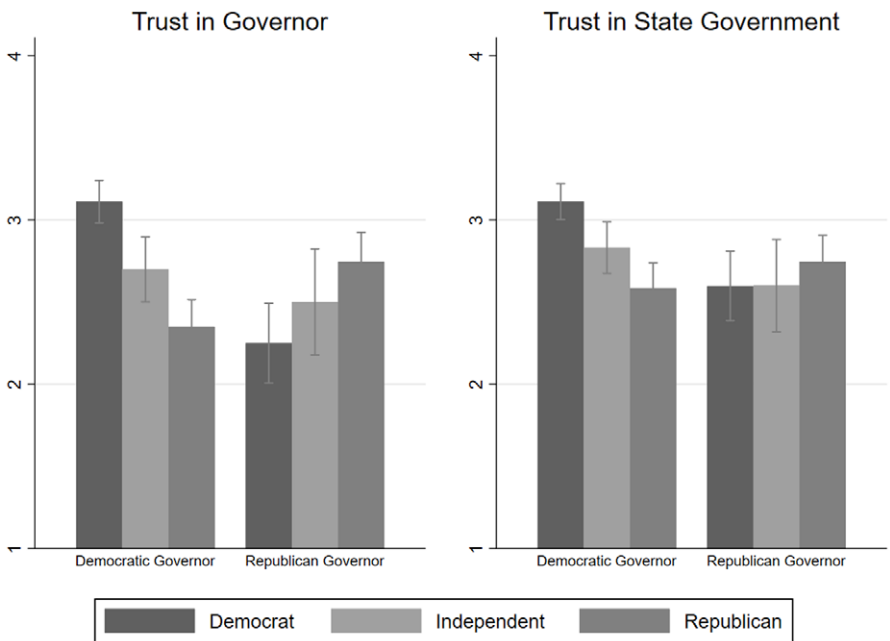


Figure 2. Trust in State Government and in the Governor to Handle the COVID-19 Pandemic by Physician Partisan Affiliation and Governor's Partisan Affiliation.

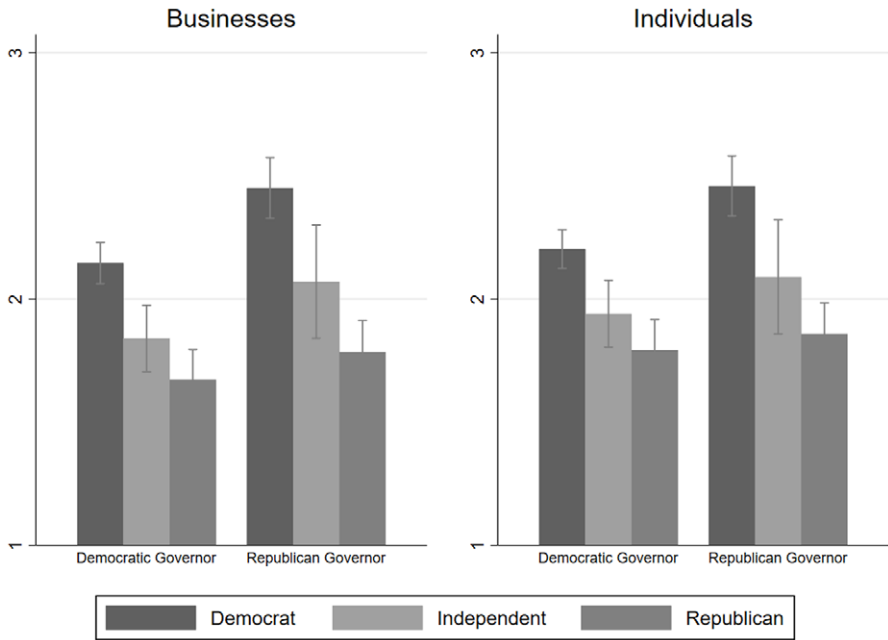


Figure 3. Physician Evaluations of State Restrictions on Businesses and Individuals to Slow the Spread of the COVID-19 Pandemic by Physician Partisan Affiliation and Governor's Partisan Affiliation.

and more likely to say there were not enough restrictions when a Republican was governor. Physicians' partisan commitments also mattered. Republican physicians, regardless of which party controlled the governorship, were less likely to say there were "not enough" restrictions and more likely to say there were "too many" restrictions.

Finally, as can be seen in [Figure 4](#), and consistent with H4, evaluations of state performance depended very much on physician partisanship and partisan control of the governor's mansion. Eighty-six percent of Democratic physicians agreed that their state was doing a good job fighting the pandemic in states with a Democratic governor compared to 57% of Republicans. In states with a Republican governor, 75% of Republicans agreed the state was doing a good job compared to 54% of Democrats. For purposes of comparison, in an AP-NORC poll general population survey conducted in May 2020, 76% of Democrats in states with a Democratic governor approved of their state government's performance during the pandemic compared to 37% of Republicans. In states with a Republican governor, in contrast, 41% of Democrats approved compared to 65% of Republicans.⁵ Overall, physicians appear

⁵The survey data used in this calculation are from AP-NORC public use files (available at <https://apnorc.org/download-data/>). The specific question is worded as follows: *Do you approve, disapprove, or neither approve nor disapprove of how each of the following is handling the coronavirus outbreak? Your state government.* We added data identifying partisan control of the governor's mansion. We have to be cautious in making comparisons given differences in sampling methodology, question wording, and timing.

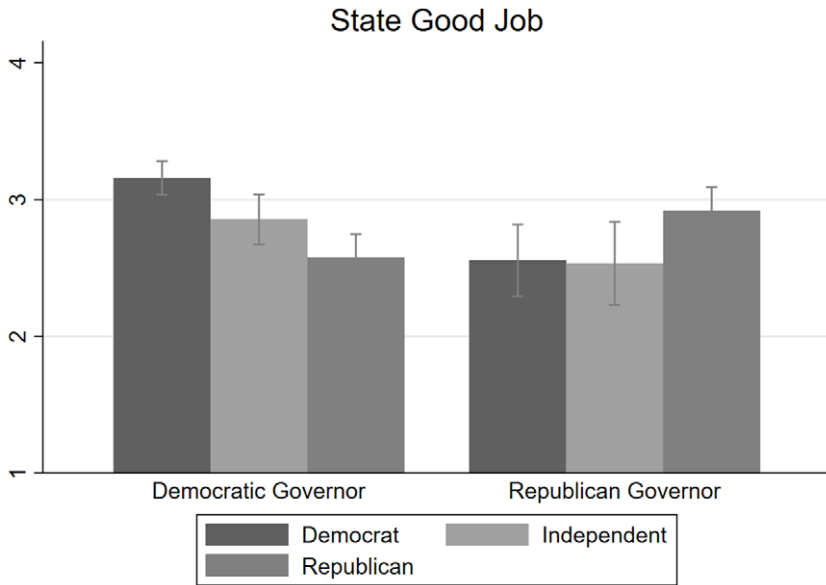


Figure 4. Physician Evaluations of State Government Performance Fighting the COVID-19 Pandemic by Physician Partisan Affiliation and Governor's Partisan Affiliation.

to be polarized in their responses, but do not appear to be as polarized as ordinary citizens.

Multivariate results

Do these results hold in a fully specified model? And do COVID-19-related outcomes matter? In [Table 2](#), we present an abbreviated set of results from our models predicting state government responsibility for the managing of the pandemic (the full set of results is provided in the [Supplementary material](#)). This allows to test the hypothesis that partisan affiliation influences attributions of treatment responsibility (H1) and to see whether the effect is conditional on the partisan affiliation of the state's governor. As [Table 2](#) reveals, physician attributions of responsibility for handling the pandemic are tied to partisan affiliation, but not the partisan affiliation of the governor. Presumably, this reflects the ideological nature of this type of question. Unlike other measures included in this analysis, beliefs about (general) government responsibility for the pandemic should transcend (specific) evaluations of individual governors' performance. As a result, beliefs about responsibility for the pandemic are rooted in broader partisan beliefs and are less influenced by the contemporary political context. We should note as well that beliefs about responsibility for the pandemic are also not influenced by the number of COVID cases within the state. Having more COVID cases does not increase the likelihood that a physician will attribute responsibility to the state or federal government.

If attributions of responsibility are more ideological, trust is often more personal and contingent on which political party governs the state (Hetherington 1998;

Table 2. Ordinal regressions of responsibility for managing the pandemic by physician partisan affiliation and gubernatorial partisan affiliation

	(1)	(2)
	State government responsibility	Federal government responsibility
Party ID (Republican)	-0.26** (0.06)	-0.30** (0.05)
Governor's Party ID (Republican)	-0.45 (0.38)	-0.03 (0.37)
PID × Governor PID	0.05 (0.09)	-0.02 (0.09)
State COVID cases per capita	-0.005 (0.01)	0.002 (0.004)
Observations	543	543
Pseudo R^2	0.043	0.063

Note. Clustered standard errors are in parentheses.

** $p < 0.01$;

* $p < 0.05$;

[†] $p < 0.10$.

Table 3. Ordinal regressions of trust in state government and the governor on physician partisan affiliation and gubernatorial partisan affiliation

	(1)	(2)
	Trust in state government	Trust in governor
Party ID (Republican)	-0.31** (0.05)	-0.37** (0.06)
Governor's Party ID (Republican)	-2.21** (0.64)	-2.99** (0.69)
PID × Governor PID	0.44** (0.11)	0.65** (0.12)
State COVID cases per capita	0.003 (0.004)	-0.003 (0.007)
Observations	544	540
Pseudo R^2	0.043	0.054

Note. Clustered standard errors are in parentheses.

** $p < 0.01$;

* $p < 0.05$;

[†] $p < 0.10$.

Hetherington and Rudolph 2020). In Table 3, we present ordinal models testing the effect of physician partisanship and gubernatorial partisan affiliation on trust in state government and, more specifically, trust in the governor to handle the pandemic. As Table 3 reveals, partisanship looms large in these models. First, partisan affiliation exerts a statistically significant impact. As a general rule, Republican physicians are less trusting of state government to handle the pandemic. Their level of trust, however, depends largely on the party of the governor. Thus, we find support for H2.

Because interaction effects can be difficult to interpret, we present the conditional effects of partisanship graphically in Figure 5.⁶ Keep in mind that Figure 5 reflects the

⁶We present a full set of marginal effects graphically for Figures 4 and 5 in the Supplementary material.

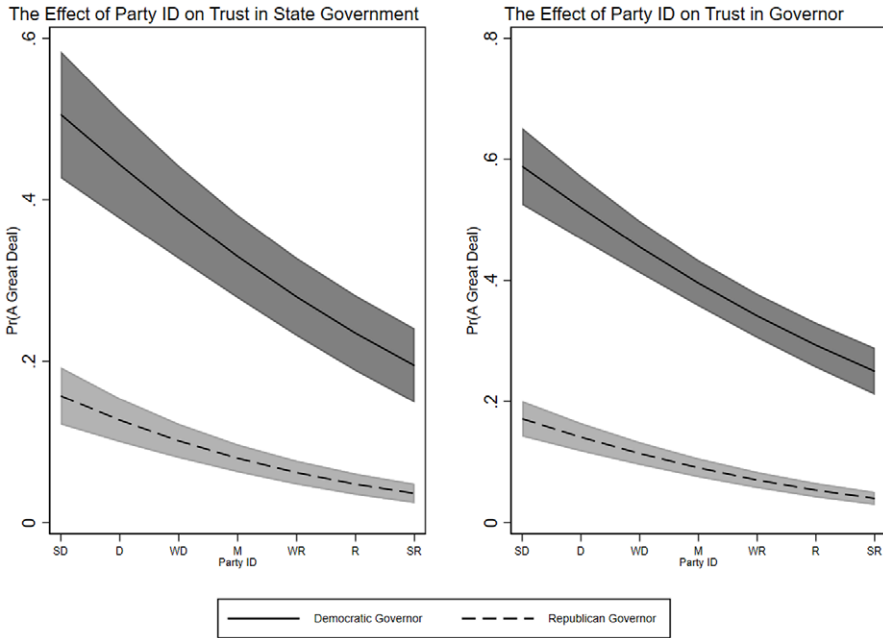


Figure 5. Marginal Effects of Physician Partisan Affiliation on Trust in State Government and in the Governor.

probability that a physician would report having “a great deal” of trust in the state governor or in the governor of the state to handle the pandemic. As [Figure 5](#) reveals, physician trust in state government and in the governor of the state are consistently lower in states with Republican governors. Perhaps surprisingly, Republican physicians also express less trust than Democratic physicians in states with Democratic and Republican governors. While partisan affiliation clearly matters, its effects are less predictable than if we just considered the bivariate results. First, the partisan effects are quite strong and predictable in states with Democratic governors. This is exactly what we would expect our models to look like. The partisan effects are less strong and less predictable in states with Republican governors. Trust is much lower overall, and Republican physicians express less trust in Republican governors than Democratic physicians. The correct interpretation, however, might be that partisanship simply matters less in Republican controlled states because both Republican and Democratic physicians express little trust in state government or in the state’s governor to effectively manage the pandemic.

If physician trust is guided by partisan affiliation, what about evaluations of the state’s efforts to fight the pandemic? To answer this question, we first consider physician evaluations of whether the state-imposed too many, about the right amount, or not enough restrictions on businesses and individuals. The results of our models are presented in [Table 4](#). As [Table 4](#) reveals, partisan affiliation matters but it is not contingent on gubernatorial partisanship. Republican physicians are less likely to believe that the state should do more to restrict individuals and businesses

Table 4. Ordinal regressions of state business and individual restrictions on physician partisan affiliation and gubernatorial partisan affiliation

	(1)	(2)
	Business restrictions	Individual restrictions
Party ID (Republican)	-0.39** (0.05)	-0.32** (0.05)
Governor's Party ID (Republican)	0.72 (0.46)	0.39 (0.42)
PID × Governor PID	-0.01 (0.08)	0.01 (0.07)
COVID cases	0.017* (0.008)	0.013[^] (0.007)
Observations	536	544
Pseudo R^2	0.120	0.081

Note. Clustered standard errors are in parentheses.

** $p < 0.01$;

* $p < 0.05$;

[^] $p < 0.10$.

regardless of whether the state has a Democratic or Republican governor. We also see evidence that COVID-19 cases influence policy opinions. The more COVID-19 cases in the state, the more likely a physician is to believe that there are not enough state-level restrictions on business and individuals. At least in evaluating their state's domain-specific policy response to the pandemic, physicians appear to be responsive to state health outcomes. Thus, we find support for H3.

Finally, we explore evaluations overall evaluations of how good of a job the state has done fighting the COVID-19 pandemic. The results of this analysis are presented in Table 5. In this case, evaluations are driven entirely by partisanship. Partisanship influences physician evaluations of state performance and the results are contingent on which political party controls the governor's mansion. As in our analysis of state trust, however, a deeper dive into the predicted probabilities reveals a surprising set of patterns (see Figure 6).

As in the earlier analysis, partisanship works as predicted when there is a Democratic governor leading the state. Democratic physicians are more likely to agree or strongly agree that the state is doing a good job fighting the pandemic while Republican physicians are more likely to disagree. In states with Republican governors, in contrast, the effect of partisan affiliation is more muted. Republican physicians are more likely to disagree that the state is doing a good job fighting the pandemic, though neither Democratic nor Republican physicians are likely to agree that the state is doing a good job.

Discussion and conclusions

Federalism can create “laboratories of democracy,” encouraging policy innovation and diffusion (Karch 2007; Shipan and Volden 2006) or it can contribute to democratic backsliding, widening policy gaps across states and extending disparities in health, education, and life expectancy (Grumbach 2018). While this is true across policy areas, perhaps nowhere are the challenges of federalism and disparate policy responses more visibly evident than during the COVID-19 pandemic. An

Table 5. Ordinal regressions of state performance on physician partisan affiliation and gubernatorial partisan affiliation

	State good job
Party ID (Republican)	-0.26** (0.06)
Governor's Party ID (Republican)	-2.04** (0.74)
PID × Governor PID	0.45** (0.13)
COVID cases	-0.004 (0.005)
Observations	542
Pseudo R ²	0.030

Note. Standard errors are in parentheses.
 **p<0.01;
 *p<0.05;
 †p<.10.

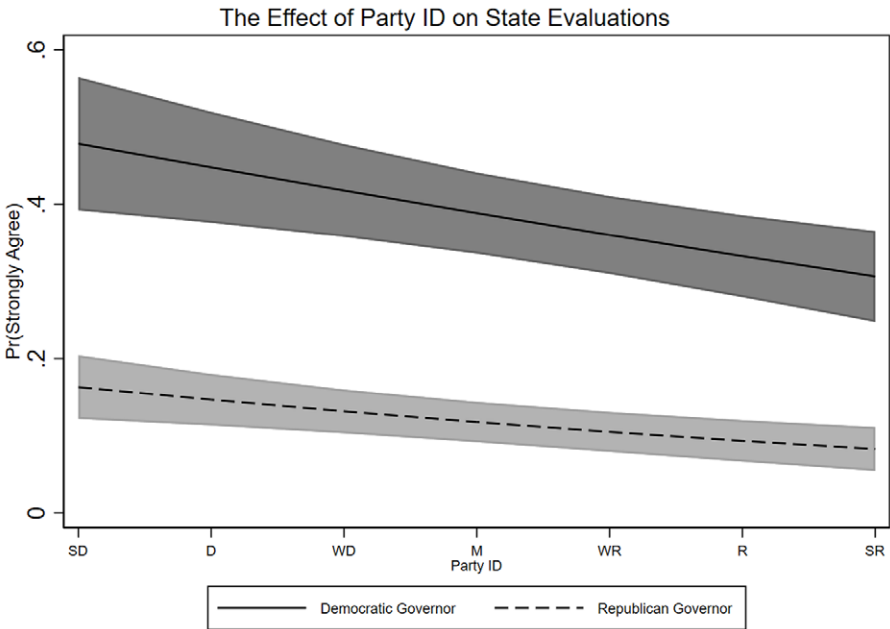


Figure 6. Marginal Effects of Physician Partisan Affiliation on Trust in State Government and in the Governor.

uncoordinated federal response by the Trump Administration left states to largely fend for themselves, and left governors in charge of many aspects of the pandemic response (Bowman and McKenzie 2020). State-level responses to the pandemic were unfortunately often driven more by partisan political considerations rather than the best available data (Birkland *et al.* 2021; Jacobs 2021; Kettl 2020; Knauer 2020). Outcomes, predictably, varied as well.

In this paper, we asked how physicians evaluated state-level responses, including who they believed should be responsible for managing the pandemic, how much trust they had in the state for handling COVID-19, their evaluations of state-level restrictions on businesses and individuals, and their evaluations of how well the state did in fighting the COVID-19 pandemic. In an ideal world, physicians would not respond to partisanship. If there is a single conclusion from these analyses, however, it is this: Physicians are not immune to state politics. Physician partisan affiliation mattered a great deal in terms whether a physician thought the state should be more (or less) responsible, how much trust they placed in the state for handling the crisis, whether they believed state-level restrictions were “not enough,” and whether they thought the state was doing a good job responding to the pandemic. In short, Republican physicians were less likely to believe the state was responsible, less trusting of state government and the state’s governor, more likely to believe there were too many (rather than not enough) restrictions on businesses and individuals, and less likely to believe the state was doing a good job.

Just how partisan are physicians? For purposes of comparison, in an AP-NORC poll general population survey conducted in May 2020, 76% of Democrats in states with a Democratic governor approved of their state government’s performance during the pandemic compared to 37% of Republicans. In states with a Republican governor, in contrast, 41% of Democrats approved compared to 65% of Republicans.⁷ Overall, physicians appear to be polarized in their responses, but do not appear to be as polarized as the general public. Similarly, in the 2020 pre-election ANES 2020 survey, in states with a Democratic governor, 87% approved of their governor’s performance compared to 33% of Republicans. In states with a Republican governor, 38% of Democrats approved of their governor’s performance compared to 75% of Republicans.⁸

Partisan politics, however, is not the end of the story. Politics was most evident in physician trust in state government, trust in the state’s governor, and evaluations of whether the state was doing a good job. In this respect, Democratic physicians were more likely to trust state government, trust the governor, and believe the state was doing a good job when a Democrat was governor. The partisan effects for Republican physicians in states controlled by Republican governors, however, were less clearly partisan. In states with Republican governors, Republican physicians reported less trust in state government and in the governor, and they were less positive in their evaluations of state efforts to combat the pandemic. In addition, the number of COVID-19 cases was an important predictor of how physicians evaluated state-level restrictions on individuals and businesses. In states with higher case counts, physicians were more likely to believe there were not enough restrictions. Overall, politics matters, but so too does the reality of the pandemic. Perhaps more to the point,

⁷The survey data used in this calculation are from AP-NORC public use files (available at <https://apnorc.org/download-data/>). The specific question is worded as follows: *Do you approve, disapprove, or neither approve nor disapprove of how each of the following is handling the coronavirus outbreak? Your state government.* We added data identifying partisan control of the governor’s mansion. We have to be cautious in making comparisons given differences in sampling methodology, question wording, and timing.

⁸We used the preelection 2020 ANES data (available at) for these calculation. The specific question wording is as follows: *Do you approve or disapprove of the way [Governor (^govname) / Mayor Muriel Bowser / your state’s Governor] has handled the COVID-19 pandemic?* A branching format was used to capture the strength of approval (or disapproval).

partisanship influences physicians in their evaluations of state policy, but the strength of the association is contingent on the state political and policy contexts.

We would be remiss if we did not conclude by noting the limitations of our study. Our results were based on a nonprobability sample and a relatively small sample ($N = 625$). While our sample compares favorably to available benchmarks, we cannot conclude with certainty that our results are representative of the population of PCPs. Moreover, in making comparisons to the general population, any differences may reflect sampling differences rather than differences in physicians versus the general public. One question we were unable to address is how physicians balance their professional identity against their partisan affiliation. We suspect that physicians with a stronger sense of professional identity would depart more readily from their prior partisan commitments. Investigating this question will, unfortunately, have to be the subject of future research.

Supplementary material. The supplementary material for this article can be found at <https://doi.org/10.1017/spq.2023.27>.

Data availability statement. Replication materials are available on SPPQ Dataverse at <https://doi.org/10.15139/S3/B0JNTU> (Goedel 2023).

Funding statement. This research was funded by an internal “Triads for Transformation” grant provided by Texas A&M University.

Competing interest. The authors declare none.

References

- Adolph, Christopher, Kenya Amano, Bree Bang-Jensen, Nancy Fullman, and John Wilkerson. 2021. “Pandemic Politics: Timing State-Level Social Distancing Responses to COVID-19.” *Journal of Health Politics, Policy and Law* 46 (2): 211–33. doi:10.1215/03616878-8802162.
- Adolph, Christopher, Kenya Amano, Bree Bang-Jensen, Nancy Fullman, Beatrice Magistro, Grace Reinke, Rachel Castellano, Megan Erickson, and John Wilkerson. 2021. “The Pandemic Policy U-Turn: Partisanship, Public Health, and Race in Decisions to Ease COVID-19 Social Distancing Policies in the United States.” *Perspectives on Politics* 20 (2): 1–23. doi:10.1017/S1537592721002036.
- Allcott, Hunt, Levi Boxell, Jacob Conway, Matthew Gentzkow, Michael Thaler, and David Yang. 2020. “Polarization and Public Health: Partisan Differences in Social Distancing during the Coronavirus Pandemic.” *Journal of Public Economics* 191: 104254.
- American Association of Medical Colleges. 2021a. Figure 26. *Primary Care Versus Nonprimary Care Physicians by Race/Ethnicity, 2018*. AAMC. <https://www.aamc.org/data-reports/workforce/interactive-data/figure-26-primary-care-versus-nonprimary-care-physicians-race/ethnicity-2018>.
- American Association of Medical Colleges. 2021b. Table 12. *Practice Specialty, Females by Race/Ethnicity, 2018*. AAMC. Retrieved July 7, 2021. <https://www.aamc.org/data-reports/workforce/data/table-12-practice-specialty-females-race/ethnicity-2018>.
- American Association of Medical Colleges. 2021c. Table 13. *Practice Specialty, Males by Race/Ethnicity, 2018*. AAMC. Retrieved July 7, 2021. <https://www.aamc.org/data-reports/workforce/data/table-13-practice-specialty-males-race/ethnicity-2018>.
- Antiel, Ryan M., Farr A. Curlin, Katherine M. James, and Jon C. Tilburt. 2009. “Physicians’ Beliefs and U.S. Health Care Reform—A National Survey.” *The New England Journal of Medicine* 361 (14): e23–3. doi:10.1056/NEJMp0907876.
- Baccini, Leonardo, and Abel Brodeur. 2020. “Explaining Governors’ Response to the COVID-19 Pandemic in the United States.” *American Politics Research* 49 (2): 215–20. doi:10.1177/1532673X20973453.
- Barrios, John M., and Yael V. Hochberg. 2021. “Risk perceptions and politics: Evidence from the COVID-19 pandemic.” *Journal of Financial Economics* 142 (2): 862–879. doi:10.1016/j.jfineco.2021.05.039.

- Béland, Daniel. 2010. "Reconsidering Policy Feedback: How Policies Affect Politics." *Administration & Society* 42 (5): 568–90.
- Beyer, David C., and Najeeb Mohideen. 2008. "The Role of Physicians and Medical Organizations in the Development, Analysis, and Implementation of Health Care Policy." *Seminars in Radiation Oncology* 18 (3): 186–193. <https://doi.org/10.1016/j.semradonc.2008.01.006>.
- Bhat, Amarnath, Lea Ann Browning-McNee, Kanwal Ghauri, and Susan Winckler. 2022. "COVID-19 Vaccine Confidence Project." *Journal of the American Pharmacists Association* 62 (1), 288–95.e2.
- Birkland, Thomas A., Kristin Taylor, Desera A. Crow, and Rob DeLeo. 2021. "Governing in a Polarized Era: Federalism and the Response of U.S. State and Federal Governments to the COVID-19 Pandemic." *Publius: The Journal of Federalism* 51 (4): 650–72. doi:10.1093/publius/pjab024.
- Blendon, Robert J., John M. Benson, and Eric C. Schneider. 2021. "The Future of Health Policy in a Partisan United States: Insights from Public Opinion Polls." *JAMA* 325 (13): 1253–4. doi:10.1001/jama.2021.1147.
- Bonica, Adam, Howard Rosenthal, and David J. Rothman. 2014. "The Political Polarization of Physicians in the United States: An Analysis of Campaign Contributions to Federal Elections, 1991 through 2012." *JAMA Internal Medicine* 174 (8): 1308–17. doi:10.1001/jamainternmed.2014.2105.
- Bonica, Adam, Howard Rosenthal, and David J. Rothman. 2015. "The Political Alignment of US Physicians: An Update Including Campaign Contributions to the Congressional Midterm Elections in 2014." *JAMA Internal Medicine* 175 (7): 1236–7. doi:10.1001/jamainternmed.2015.1332.
- Bonica, Adam, Howard Rosenthal, and David J. Rothman. 2019. "Physician Activism in American Politics: The Opposition to the Price Nomination." *PLoS One* 14 (6): e0215802.
- Bowman, Ann O'M., and James H. McKenzie. 2020. "Managing a Pandemic at a Less than Global Scale: Governors Take the Lead." *The American Review of Public Administration* 50 (6-7): 551–9. doi:10.1177/0275074020941700.
- Callaghan, Timothy, and Lawrence R. Jacobs. 2015. "Interest Group Conflict over Medicaid Expansion: The Surprising Impact of Public Advocates." *American Journal of Public Health* 106 (2): 308–13. doi:10.2105/AJPH.2015.302943.
- Callaghan, Timothy, David Washburn, Kirby Goidel, Tasmiah Nuzhath, Abigail Spiegelman, Julia Scobee, Ali Moghtaderi, and Matthew Motta. 2022. "Imperfect Messengers? An Analysis of Vaccine Confidence among Primary Care Physicians." *Vaccine* 40 (18): 2588–603. doi:10.1016/j.vaccine.2022.03.025.
- Campbell, Andrea Louise. 2003. *How Policies Make Citizens: Senior Political Activism and the American Welfare State*. Princeton, NJ: Princeton University Press.
- Clarke, Martina A., Joi L. Moore, Linsey M. Steege, Richelle J. Koopman, Jeffery L. Belden, Shannon M. Canfield, Susan E. Meadows, Susan G. Elliott, and Min Soon Kim. 2016. "Health Information Needs, Sources, and Barriers of Primary Care Patients to Achieve Patient-Centered Care: A Literature Review." *Health Informatics Journal* 22 (4): 992–1016.
- Connolly, J. M., Klostfstad, C., Uscinski, J., and West, J. 2020. "Public preferences for Zika policy and responsibility in the absence of partisan cues." *Journal of Public Policy* 40 (3): 402–427. doi:10.1017/S0143814X19000011.
- Contandriopoulos, Damien, Astrid Brousselle, Catherine Larouche, Mylaine Breton, Michèle Rivard, Marie-Dominique Beaulieu, Jeannie Haggerty, Geneviève Champagne, and Mélanie Perroux. 2018. "Healthcare Reforms, Inertia Polarization and Group Influence." *Health Policy* 122 (9): 1018–27.
- Corlette, Sabrina, Robert Berenson, Erik Wengle, Kevin Lucia, and Tyler Thomas. 2021. *Impact of the COVID-19 Pandemic on Primary Care Practices*. Washington, DC: The Urban Institute.
- Druckman, James N., Samara Klar, Yanna Krupnikov, Matthew Levendusky, and John Barry Ryan. 2021. "Affective Polarization, Local Contexts and Public Opinion in America." *Nature Human Behaviour* 5 (1): 28–38. doi:10.1038/s41562-020-01012-5.
- Elledge, Brenda L., Michael Brand, James L. Regens, and Daniel T. Boatright. 2008. "Implications of Public Understanding of Avian Influenza for Fostering Effective Risk Communication." *Health Promotion Practice* 9 (4_suppl): 54S–9S.
- Findling, M. G., R. J. Blendon, and J. M. Benson. 2022. "Polarized Public Opinion about Public Health During the Covid-19 Pandemic: Political Divides and Future Implications." *JAMA Health Forum* 3 (3): e220016. doi:10.1001/jamahealthforum.2022.0016.
- Finney Rutten, Lila J., Philip D. Parks, Emily Weiser, Chun Fan, Debra J. Jacobson, Gregory D. Jenkins, Xuan Zhu, Joan M. Griffin, and Paul J. Limburg. 2022. "Health Care Provider Characteristics Associated with

- Colorectal Cancer Screening Preferences and Use." *Mayo Clinic Proceedings* 97 (1): 101–9. doi:10.1016/j.mayocp.2021.06.028.
- Fiscella, Kevin, Sean Meldrum, Peter Franks, Cleveland G. Shields, Paul Duberstein, Susan H. McDaniel, and Ronald M. Epstein. 2004. Patient Trust: Is It Related to Patient-Centered Behavior of Primary Care Physicians? *Medical Care* 42 (11): 1049–55.
- Fowler, Luke, Jaclyn J. Kettler, and Stephanie L. Witt. 2020. "Pandemics and Partisanship: Following Old Paths into Uncharted Territory." *American Politics Research* 49 (1): 3–16. doi:10.1177/1532673X20961024.
- Gabay, Gillie. 2015. "Perceived Control over Health, Communication and Patient–Physician Trust." *Patient Education and Counseling* 98 (12): 1550–7.
- Gadarian, Shana Kushner, Sara Wallace Goodman, and Thomas B. Pepinsky. 2021. "Partisanship, Health Behavior, and Policy Attitudes in the Early Stages of the COVID-19 Pandemic." *PLoS One* 16 (4): e0249596.
- Gelman, Andrew. 2007. "Struggles with Survey Weighting and Regression Modeling." *Statistical Science* 22 (2), 153–64. doi:10.1214/088342306000000691.
- Goidel, Kirby. 2023. "Replication Data for: Professional Partisans? Primary Care Physicians, State Governments, and COVID-19 Responsibility and Response, UNC Dataverse, V1, UNF:6:OkP/53fU2CfTj1i-bU44DTQ== [fileUNF]. doi:10.15139/S3/B0JNTU.
- Goidel, Kirby, Timothy Callaghan, David J. Washburn, Tasmiah Nuzhath, Julia Scobee, Abigail Spiegelman, and Matt Motta. 2022. "Physician Trust in the News Media and Attitudes toward COVID-19." *Journal of Health Politics, Policy and Law* 48 (3): 317–350. doi: 10.1215/03616878-10358696.
- Gomez, B. T. and Wilson, J. M. 2008. "Political sophistication and attributions of blame in the wake of Hurricane Katrina." *Publius: The Journal of Federalism* 38 (4): 633–650. doi: 10.1093/publius/pjn016.
- Gray, Virginia, David Lowery, and Jennifer K. Benz. 2013. *Interest Groups and Health Care Reform across the United States*. Washington, DC: Georgetown University Press.
- Greer, Scott L., Elizabeth J. King, Elize Massard da Fonseca, and Andre Peralta-Santos. 2020. "The Comparative Politics of COVID-19: The Need to Understand Government Responses." *Global Public Health* 15 (9): 1413–6. doi:10.1080/17441692.2020.1783340.
- Grossman, Guy, Soojong Kim, M. Rexer Jonah, and Harsha Thirumurthy. 2020. "Political Partisanship Influences Behavioral Responses to Governors' Recommendations for COVID-19 Prevention in the United States." *Proceedings of the National Academy of Sciences* 117 (39): 24144–53. doi:10.1073/pnas.2007835117.
- Gruen, Russell L., Eric G. Campbell, and David Blumenthal. 2006. "Public Roles of US Physicians: Community Participation, Political Involvement, and Collective Advocacy." *JAMA* 296 (20): 2467–75.
- Grumbach, Jacob M. 2018. "From Backwaters to Major Policymakers: Policy Polarization in the States, 1970–2014." *Perspectives on Politics* 16 (2): 416–35. doi:10.1017/S153759271700425X.
- Gusmano, Michael K. 2019. "Physician Advocacy for Public Health." *Journal of Health Politics, Policy and Law* 44 (1): 5–41. doi:10.1215/03616878-7206707.
- Harrison, Stephen. 2015. "Street-Level Bureaucracy and Professionalism in Health Services." In *Understanding Street-Level Bureaucracy*, 61–78. Bristol: Policy Press.
- Heaney, Michael T. 2006. "Brokering Health Policy: Coalitions, Parties, and Interest Group Influence." *Journal of Health Politics, Policy and Law* 31 (5): 887–944.
- Hermes-DeSantis, Evelyn R., Robert T. Hunter, Julie Welch, Roma Bhavsar, Daniel Boulos, and Marie-Ange Noue. 2021. "Preferences for Accessing Medical Information in the Digital Age: Health Care Professional Survey." *Journal of Medical Internet Research* 23 (6): e25868. doi:10.2196/25868.
- Hersh, Eitan D., and Matthew N. Goldenberg. 2016. "Democratic and Republican Physicians Provide Different Care on Politicized Health Issues." *Proceedings of the National Academy of Sciences* 113 (42): 11811–6. doi:10.1073/pnas.1606609113.
- Hetherington, Marc J. 1998. "The Political Relevance of Political Trust." *American Political Science Review* 92 (4): 791–808.
- Hetherington, Marc J., and Thomas J. Rudolph. 2020. *Why Washington Won't Work: Polarization, Political Trust, and the Governing Crisis*. Chicago: University of Chicago Press.
- Hsiao, Yuan, and Scott Radnitz. 2021. "Allies or Agitators? How Partisan Identity Shapes Public Opinion about Violent or Nonviolent Protests." *Political Communication* 38 (4): 479–97. doi:10.1080/10584609.2020.1793848.

- Huddy, Leonie, and Alexa Bankert. 2017. *Political Partisanship as a Social Identity*. Oxford: Oxford University Press.
- Huddy, Leonie, Lilliana Mason, and Lene Aarøe. 2015. "Expressive Partisanship: Campaign Involvement, Political Emotion, and Partisan Identity." *American Political Science Review* 109 (1): 1–17. doi:10.1017/S0003055414000604.
- Iyengar, Shanto. 1989. "How Citizens Think About National Issues: A Matter of Responsibility." *American Journal of Political Science* 33 (4): 878–900.
- Jacobs, Nicholas. 2021. "Federalism, Polarization, and Policy Responsibility during COVID-19: Experimental and Observational Evidence from the United States." *Publius: The Journal of Federalism* 51 (4): 693–719. doi:10.1093/publius/pjab014.
- Karch, Andrew. 2007. *Democratic Laboratories: Policy Diffusion among the American States*. Ann Arbor, MI: University of Michigan Press.
- Keller, Teresa Lynn. 1999. *Toward a Theory of Bedside Bureaucracy: Physicians as Street-Level Bureaucrats*. Unpublished Doctoral Dissertation. Saint Louis University, Saint Louis, MO.
- Kempf, Elisabeth, and Margarita Tsoutsoura. 2021. "Partisan Professionals: Evidence from Credit Rating Analysts." *The Journal of Finance* 76 (6): 2805–56.
- Kettl, Donald F. 2020. "States Divided: The Implications of American Federalism for COVID-19." *Public Administration Review* 80 (4): 595–602. doi:10.1111/puar.13243.
- Knauer, Nancy J. 2020. "The COVID-19 Pandemic and Federalism: Who Decides?" *N.Y.U. Journal of Legislation & Public Policy* 23 (1): 1–44.
- Kosnik, Lea-Rachel, and Allen Bellas. 2020. "Drivers of COVID-19 Stay at Home Orders: Epidemiologic, Economic, or Political Concerns?" *Economics of Disasters and Climate Change* 4 (3): 503–14. doi:10.1007/s41885-020-00073-0.
- Kraus, Chadd K., and Thomas A. Suarez. 2004. "Is there a Doctor in the House?... Or the Senate?: Physicians in US Congress, 1960–2004." *JAMA* 292 (17): 2125–9.
- Landers, Steven H., and Ashwini R. Sehgal. 2000. "How Do Physicians Lobby their Members of Congress?" *Archives of Internal Medicine* 160 (21): 3248–51.
- Laugesen, Miriam J., and Thomas Rice. 2003. "Is the Doctor in? The Evolving Role of Organized Medicine in Health Policy." *Journal of Health Politics, Policy and Law* 28 (2-3): 289–316. doi:10.1215/03616878-28-2-3-289.
- Liepert, Amy E., Sarah Beilke, Glen Levenson, and Ann M Sheehy. 2021. "Health Policy Advocacy Engagement: A Physician Survey." *WMJ* 120 (1): 29–33.
- Lowery, David, Virginia Gray, Jennifer Benz, Mary Deason, Justin Kirkland, and Jennifer Sykes. 2009. "Understanding the Relationship between Health PACs and Health Lobbying in the American States." *Publius: The Journal of Federalism* 39 (1): 70–94. doi:10.1093/publius/pjn027.
- Makridis, Christos, and Jonathan T. Rothwell. 2020. The Real Cost of Political Polarization: Evidence from the COVID-19 Pandemic. *SSRN Electronic Journal*, <https://doi.org/10.2139/SSRN.3638373>.
- McCarthy, Devin. 2019. "Partisanship Vs. Principle: Understanding Public Opinion on Same-Day Registration." *Public Opinion Quarterly* 83 (3): 568–83. doi:10.1093/poq/nfz027.
- Motta, Matthew. 2021. "Political Scientists: A Profile of Congressional Candidates with STEM Backgrounds." *PS: Political Science & Politics* 54 (2): 202–7.
- Motta, Matt, Dominik Stecula, and Christina Farhart. 2020. "How Right-Leaning Media Coverage of COVID-19 Facilitated the Spread of Misinformation in the Early Stages of the Pandemic in the U.S." *Canadian Journal of Political Science* 53 (2): 335–42. doi:10.1017/S0008423920000396.
- O'Brien Pott, Maureen, Anissa S. Blanshan, Kelly M. Huneke, Barbara L. Baasch Thomas, and David A. Cook. 2021. "Barriers to Identifying and Obtaining CME: A National Survey of Physicians, Nurse Practitioners and Physician Assistants." *BMC Medical Education* 21 (1): 168. doi:10.1186/s12909-021-02595-x.
- Oliver, Thomas R. 2006. "The Politics of Public Health Policy." *Annual Review of Public Health* 27 (1): 195–233. doi:10.1146/annurev.publhealth.25.101802.123126.
- Pasek, Josh. 2015. "When Will Nonprobability Surveys Mirror Probability Surveys? Considering Types of Inference and Weighting Strategies as Criteria for Correspondence." *International Journal of Public Opinion Research* 28 (2): 269–91. doi:10.1093/ijpor/edv016.
- Pears, E. and Sydnor, E. 2022. "COVID-19 and the Culture of American Federalism." *RSF: The Russell Sage Foundation Journal of the Social Sciences* 8 (8): 181–220. doi:10.7758/RSF.2022.8.8.09.

- Pew Research Center. 2020. *Most Americans Say State Governments Have Lifted COVID-19 Restrictions Too Quickly*. <https://www.pewresearch.org/politics/2020/08/06/most-americans-say-state-governments-have-lifted-covid-19-restrictions-too-quickly/>
- Rudolph, Thomas J. 2003. "Who's Responsible for the Economy? The Formation and Consequences of Responsibility Attributions." *American Journal of Political Science* 47 (4): 698–713. doi:10.1111/1540-5907.00049.
- Schwartz, Rachel, Manisha Dubey, Danielle Blanch-Hartigan, Justin J. Sanders, and Judith A. Hall. 2021. "Physician Empathy According to Physicians: A Multi-Specialty Qualitative Analysis." *Patient Education and Counseling* 104 (10): 2425–31. doi:10.1016/j.pec.2021.07.024.
- Schwartz, Rachel, Lars G. Osterberg, and Judith A. Hall. 2022. "Physicians, Emotion, and the Clinical Encounter: A Survey of Physicians' Experiences." *Patient Education and Counseling* 104 (10): 2425–2431. doi:10.1016/j.pec.2022.03.001.
- Shields, T. G. and Goidel, R. K. 1998. Taking credit and avoiding blame: Good news, spin control, and democratic accountability. *Political Communication* 15 (1): 99–115. <http://doi.org/10.1080/10584609.1998.11641157>.
- Shipan, Charles R., and Craig Volden. 2006. "Bottom-Up Federalism: The Diffusion of Antismoking Policies from U.S. Cities to States." *American Journal of Political Science* 50 (4): 825–43. doi:10.1111/j.1540-5907.2006.00218.x.
- Shvetsova, Olga, Andrei Zhirnov, Frank R. Giannelli, Michael A. Catalano, and Olivia Catalano. 2022. "Governor's Party, Policies, and COVID-19 Outcomes: Further Evidence of an Effect." *American Journal of Preventive Medicine* 62 (3): 433–7. doi:10.1016/j.amepre.2021.09.003.
- Taha, Sheena Aislinn, Kimberly Matheson, and Hymie Anisman. 2013. "The 2009 H1N1 Influenza Pandemic: The Role of Threat, Coping, and Media Trust on Vaccination Intentions in Canada." *Journal of Health Communication* 18 (3): 278–90.
- Tellis, Gerard J., Nitish Sood, and Ashish Sood. 2020. "Why Did US Governors Delay Lockdowns against COVID-19? Disease Science Vs Learning, Cascades, and Political Polarization." In *Disease Science Vs Learning, Cascades, and Political Polarization*. USC Marshall School of Business Research Paper. Available at SSRN: <https://ssrn.com/abstract=3575004> or <http://dx.doi.org/10.2139/ssrn.3575004>.
- VanDusky-Allen, Julie A., Stephen M. Utych, and Michael Catalano. 2022. "Partisanship, Policy, and Americans' Evaluations of State-Level COVID-19 Policies Prior to the 2020 Election." *Political Research Quarterly* 75 (2): 479–96.
- Wang, Gang, Richard A. Devine, and Gonzalo Molina-Sieiro. 2021. "Democratic Governors Quicker to Issue Stay-at-Home Orders in Response to COVID-19." *The Leadership Quarterly* 101542.
- Warner, Mildred E., and Xue Zhang. 2021. "Social Safety Nets and COVID-19 Stay Home Orders across US States: A Comparative Policy Analysis." *Journal of Comparative Policy Analysis: Research and Practice* 23 (2): 176–90. doi:10.1080/13876988.2021.1874243.
- Weissert, Carol S., Matthew J. Uttermark, Kenneth R. Mackie, and Alexandra Artiles. 2021. "Governors in Control: Executive Orders, State-Local Preemption, and the COVID-19 Pandemic." *Publius: The Journal of Federalism* 51 (3): 396–428. doi:10.1093/publius/pjab013.
- Wilcox, Lindsay. 2021. *Physician Salary Report 2021: Compensation Steady Despite COVID-19*. Weatherby Healthcare. Retrieved July 7, 2021. <https://weatherbyhealthcare.com/blog/annual-physician-salary-report>
- Zhang, Xue, and Mildred E. Warner. 2020. "COVID-19 Policy Differences across US States: Shutdowns, Reopening, and Mask Mandates." *International Journal of Environmental Research and Public Health* 17 (24): 9520. doi:10.3390/ijerph17249520.

Author Biographies. Kirby Goidel is a professor of political science at Texas A&M University. His research investigates political behavior, political communication, and public policy.

Timothy Callaghan is an Associate Professor of health policy and politics in the Department of Health Law, Policy, and Management at the Boston University School of Public Health. His research focuses on how politics, policy, and place work together to influence health in America.

Tasmiah Nuzhath is a Postdoctoral Research Fellow in the Department of Global Health and Population at Harvard T.H. Chan School of Public Health at Harvard University. Her research focuses on the social, political and structural influences on equitable healthcare access and utilization and disease prevention.

Julia Scobee is a Master of Public Health Candidate at Boston University with a Context Certificate in Healthcare Management. Her interests focus on patient-centric care and improving care processes and outcomes.

David Washburn is clinical associate professor and director of the MHA program in the Department of Health Policy and Management at Tulane University's School of Public Health and Tropical Medicine.

Matthew Motta is an Assistant Professor of Health Law, Policy, & Management at Boston University's School of Public Health. His research focuses on public opinion, science communication, and health and environmental policy.

Cite this article: Goidel, Kirby, Timothy Callaghan, Tasmiah Nuzhath, Julia Scobee, David Washburn, and Matthew Motta. 2024. Professional Partisans? Primary Care Physicians, State Governments, and COVID-19 Responsibility and Response. *State Politics & Policy Quarterly* 24 (2): 145–166, doi:10.1017/spq.2023.27