Policy Facts or Partisan Friction?:

Explaining Political Communication on America's Opioid Epidemic

Rachel Porter*

Abstract

Party messaging has become a central component of today's political dialogue. However, not all issues can be so easily employed to facilitate partisan messaging goals. To assess how politicians define and dramatize party distinctions over issues for which party stances are not immediately clear, I turn to America's opioid epidemic. Assessing the topical content of opioid issue text from an original collection of congressional campaign platforms, I find the local salience of the opioid crisis to be highly predictive of politicians' messaging behavior. Candidates from districts with a relatively high rate of opioid deaths tend to focus their opioid issue positions on CDC-endorsed publichealth solutions for the crisis; alternatively, candidates from districts with a relatively low rate of opioid deaths use opioid messaging opportunities as a vehicle to purport party-defining issues that have only loose ties to America's opioid epidemic. Pairing a novel method for multi-corpora topic modeling with text from bill summaries, floor speeches, and press releases about opioid issues, I find that incumbents carry forward their campaign messaging behaviors to Congress. These results suggest that rhetoric from political elites plays a pivotal role in perpetuating harmful stigmas about addiction, and discourages treatment-seeking behaviors.

^{*}The University of North Carolina at Chapel Hill, Department of Political Science

Partisan messaging is a staple in today's political discourse. Promoting a policy platform (Pope and Woon, 2009), employing unified rhetoric (Groeling, 2010), and putting the opposition on-the-record through embarrassing "gotcha" votes (Reynolds, 2017) all serve as messaging tactics parties use to differentiate themselves, effectively creating a "brand." Of course, branding by definition involves the promotion of a product to a consumer—in this case, encouraging the electorate to vote for a party's candidate. A bevy of research demonstrates that party brands help voters decide who they should support in elections (e.g., Snyder and Ting 2002; Levendusky 2009; Aldrich 2011). In addition to communicating an informational cue, partisan messaging also energizes the party base. Mason (2018) describes "us versus them" messaging as a key mechanism increasing voter engagement. What's more, Barber and Pope (2019) argue that the electorate today is increasingly composed of "loyalists" whose party ties are a result of group attachments rather than ideology, making party-brand maintenance all the more important to sustaining a reliable base of support.

To maximize their brand's utility, politicians take every available opportunity to engage in partisan messaging (Lee, 2016); however, communicating party divisions is not always easy. "Programmatic" issues, as defined by Carmines and Stimson (1980), present an especially steep messaging challenge. On these issues, politicians cannot employ the kinds of tried-and-true symbolic arguments they would normally use to connect with voters. This is because party cleavages on programmatic issues concern the technical details of public policy formation, which are less familiar to the electorate. Explaining party stances on programmatic topics not only requires a substantial investment of time and resources, but also exposes voters to the dreaded sausage-making policy process. Although position taking on programmatic issues may seem like more trouble than its worth, elites feel compelled to message on salient issues-of-the-day—regardless of the perceived costs of doing so.

Motivated by this tension, I investigate how politicians reconcile their partisan messaging goals with the high price associated with position taking on programmatic issues. I expect that *local issue intensity* will be decisive in determining *how* elites structure their position taking. To test my theory, I focus in on America's opioid epidemic. The opioid crisis constitutes a salient and multifaceted "programmatic" issue: partisan differences about how to best manage opioid use disorder concern complex matters of clinical medicine and subtle divisions over the allocation of public health resources. The overwhelming majority of Americans lack a "gut reaction" for party positions on opioid issues. One of the factors that makes opioid addiction an especially unique public health crisis is its heterogeneous spread throughout the United States. I leverage this heterogeneity to assess if and how the epidemic's local salience impacts the rhetoric politicians use to talk about opioid issues. My analysis of opioid position taking relies on an original collection of text data from policy platforms found on candidates' campaign websites for the 2018 and 2020 congressional elections. Campaign platforms are a data source well-suited for my purposes because they provide a consolidated summary of both a candidate's issue priorities (Sulkin et al., 2007) and messaging tactics (Druckman et al., 2009).

I find that politicians who ran in districts where the epidemic was not locally-salient (i.e., there was a lower rate of district deaths by opioid overdose) used their opioid positions as a vehicle to talk about symbolic policies—like immigration (Republicans) or criminal justice (Democrats)—which have familiar partisan divisions that resonate with voters, but only loose ties to the epidemic itself. Conversely, I show that politicians who ran in districts where the opioid crisis was locally-salient (i.e., there was an especially high rate of district deaths by opioid overdose) tended to focus their opioid platform text on scientifically-backed solutions for treating and thwarting opioid use disorder. These programmatic positions dealt with the nuts and bolts of public health policy, referencing specific legislation or treatment protocols.

The implications of my findings stand to have the strongest ramifications if politicians carry forward their *campaign* messaging tactics into their *legislative* communications. Members of Congress' public statements reach much broader audiences and hold greater clout with the public than the average candidate's campaign platform. To broadly assess legislators' position taking on opioids, I analyze the topical content of press releases, floor speeches,

and proposed bill summaries from the 115th and 116th Congresses. Measuring similarities in politicians' rhetoric across multiple channels for position taking would ideally involve estimating a single topic model for multiple corpora simultaneously (e.g., include floor speeches and policy platforms in a single model). This would ensure that model-identified topics are the same for all document types, allowing for the direct comparison of politicians' opioid messaging across different sources of text. Existing models for topic discovery cannot adequately accommodate this kind of analysis because they should only be estimated over one document type at a time (e.g., include floor speeches or policy platforms in a single model). If individual models are estimated for each corpus type, there is no guarantee that generated topics will be consistent enough across models to facilitate content comparisons.

To tackle this limitation, I employ a new method by Porter, Olivella, and Imai (2021) that allows multiple corpora to be employed in a single topic model. Using this method, I show that politicians carry forward their rhetorical strategies from campaigns into their legislative position taking. Incumbents from districts where the opioid epidemic was locally-salient maintained a focus on "programmatic" public health solutions for addiction in their opioid-related text from press releases, floor speeches, and proposed bills. The majority of incumbents, however, continued to employ "symbolic" rhetorical strategies in their opioid-related texts once they reach Congress; these rhetorical frames were most pronounced in press releases, and the least prevalent in floor speeches. If Americans' knowledge about public policy is indeed a reflection of "how those complex debates has been simplified, packaged and translated" (Pollock et al. 1993, p.33), these results could signal a long road ahead for America's opioid crisis.

Party Messaging & Political Power

Swaying undecided voters and mobilizing the party base have taken on renewed importance over the past several decades with the narrowing of partisan majorities in Congress. From the mid- to late-20th century, the Democratic Party enjoyed a period of nearly uninterrupted

majority status in the U.S. House of Representatives. However, since the turn-of-the-century, party control of Congress has changed hands numerous times and the margins for partisan control have often come down to a handful of seats. Whether it be the ability to fulfill legislative priorities (Cox and Mager, 1999; Aldrich and Rohde, 2011), exercise negative agenda control (Gailmard and Jenkins, 2007), or guide the informational environment (Curry, 2015), the spoils of majority party status in Congress are numerous. Rank-and-file lawmakers also benefit greatly when their party is in the majority: they gain access to valuable earmarks (Balla et al., 2002) and have more success raising money from outside their own district (Gimpel et al., 2008). These incentives motivate legislators to help their party achieve majority status by promoting party unity. If majority party members are especially loyal, they are more likely to find themselves on prestige committees (Heberlig, 2003) and are more likely to see their bills advance through the legislative process (Hasecke and Mycoff, 2007). Those members who fail to fall in line, conversely, tend to fall out of favor with party elites, facing legislative and electoral consequences (Jacobson and Carson, 2016). In short, for both individual party members and the party as a collective, promoting the party brand to attain and retain majority status is a critical priority.

Lee (2016) contends that today's explosion in party messaging is a direct result of intensified competition for institutional control. In particular, she highlights the Republicans' "Contract with America" in 1994 and Democrats' "Six for '06" agenda as early signals of a move toward cohesive party branding. Each messaging campaign successfully brought the party together over a slate of common policy ideas and, consequently, flipped majority control in both chambers. Since then, partisan communication has continued to professionalize and modernize. Funds dedicated to public relations and salaries for communications staffers have continued to rise year-after-year, despite congressional office budgetary cuts (Petersen, 2020; Crosson et al., 2020). Today, nearly every member of Congress has adopted some form of social media to ensure their partisan messages reach constituents (Gelman, 2020). Online campaign resources also give congressional candidates easy access to talking points

on national issues and partisan branding materials, further promoting and perpetuating the party image (Litman, 2017).

The institutionalization of political communication has supplied politicians with the motivation and tools they need to doggedly pursue their messaging goals. For issues central to present-day party alignments, defining and dramatizing party differences should be straightforward. Politicians can simply toe the party line using well-worn rhetoric that is familiar to voters. However, on issues for which voters lack a "gut response" about party distinctions, messaging should become more laborious and time intensive. This begs the question: how do politicians define and dramatize party distinctions over issues for which party stances are not immediately clear to voters?

Symbolic & Programmatic Issue Messaging

"Symbolic" issues, per Carmines and Stimson (1980), are emblematic of party differences, pertain to policy outcomes, and have a long-standing place on the political agenda. Because symbolic issues are deeply familiar, voters typically have "gut reactions" about party positions, no matter these voters' "level of political sophistication (well-informed or less informed), interest in politics (highly attentive or uninterested), or zeal for voting (active or apathetic)" (Cizmar, 2011). "Programmatic" issues, conversely, deal with the means by which a policy goal is achieved, rather than the goal itself. Topics addressing foreign policy, regulation, and matters of the economy often fall under the umbrella of programmatic issues (Bailey and Wilcox 1998). Because policy making is incremental, parties will often have multiple points of disagreement in their deliberations about programmatic issues (Carmines and Stimson, 1980). To complicate matters, these disagreements almost always concern technical details of legislation, and understanding such arguments requires a high level of political sophistication (Cobb and Kuklinski, 1997).

For politicians, the most salient distinction between symbolic and programmatic issue types is the value each offers as a conduit for party messaging. Communicating party differences is straightforward with symbolic issues because cleavages exist over well-worn conflicts about policy outcomes. For instance, Americans are all too familiar with party positions about abortion. Politicians can, therefore, simply toe the party line in their abortion rhetoric, which attends to partisan messaging goals by reinforcing the party brand. Symbolic issues most certainly have complex facets, but politicians' messages need not hinge on these details. On programmatic issues, voters lack an awareness of party divisions, and educating voters about these divisions presents a hefty challenge that runs counter to parties' messaging objectives of clarity and consistency (Sellers, 2009). This is because party cleavages on programmatic issues exist over decisions made during the policy development process—a nuanced phase of lawmaking with which the average American lacks both familiarity and interest (Oleszek and Oleszek, 2012).

Although programmatic issues present significant messaging obstacles, it is not as though politicians can simply remain silent on these issues—especially when they garner national salience. Such behavior would go against their risk-averse inclinations as single-minded seekers of reelection (Mayhew, 1974). Elites tend to take positions on issues they perceive as important to the American public for fear of electoral consequences (Grose et al., 2015; Highton and Rocca, 2005). For example, Sides (2007) shows that candidates running in the 2000 and 2002 congressional elections were quick to take positions on salient, national issues—even if they were "owned" by the other party. To assess the messaging tactics politicians use to communicate party differences over salient "programmatic" issues, I turn to America's opioid epidemic.

America's Opioid Epidemic

The roots of America's opioid epidemic can be traced back to physicians who—under pressure from pharmaceutical companies—began by prescribing drugs like OxyContin and Percocet without a full understanding of their addictive qualities. Today, opioid dependence is prevalent across racial, social, and geographic lines, affecting Americans of all stripes. The

impacts of the opioid epidemic on American communities have been, and continue to be, far reaching. Per Moffitt (2020), opioids have "impaired economic productivity, strained health care systems, created new demands on the criminal justice system, and burdened family and community networks" (p. 171). Over the past two decades, opioids have claimed over half a million lives in the United States. The CDC estimates that opioids were responsible for over 93,000 deaths in 2020: a grim milestone as both the highest number of opioid deaths in a twelve-month period, and the largest single-year overdose increase since the crisis began.

The opioid epidemic constitutes a salient and multifaceted "programmatic" issue; both parties agree that steps must be taken to stem the scourge of opioid addiction, but party cleavages exist over the best means to achieve this goal. Republicans maintain that decentralization is crucial to curbing opioid abuse; ensuring that resources are doled out at the state and local level where they are needed most (Republican National Committee, 2016). Democrats, on the other hand, view publicly funded opioid rehabilitation as the most effective means for reducing addiction because it fulfills a public demand for more cost-effective treatment options (Democratic National Committee, 2020). Partisan differences about how to best manage the opioid epidemic concern complex matters of clinical medicine and subtle divisions over the allocation of public health resources; the overwhelming majority of Americans lack a "gut reaction" for party positions on these kinds of "hard" opioid issues. Explaining such divisions to voters would involve a substantial investment of time, effort, and resources. Furthermore, while the parties disagree on some of the finer points of policy, the passage of opioid-curbing legislation has been largely bipartisan. Final votes in the House on major legislative packages aiming to combat the opioid crisis across the 115th and 116th Congresses saw near-unanimous agreement. Such bipartisanship, though, does not fit squarely with party messaging objectives. These obstacles present a dilemma for politicians: how do they maximize the benefits while minimizing the costs associated with position taking on opioid issues?

How Do Politicians Talk About Opioids?

On Thursday October 26th, 2017, President Trump officially declared the opioid crisis a public health emergency, giving the epidemic national-level recognition and placing it among Congress' top legislative priorities. Since this declaration, numerous bills seeking to stem opioid addiction have been signed into law, including the landmark SUPPORT Patients and Communities Act of 2018. Existing research contends that politicians take public positions on the opioid crisis because it constitutes a salient issue-of-the-day (Weiss and Zoorob, 2021); taking this work a step further, I explore the *contents* of such messaging. I posit that politicians' rhetoric about opioid issues will be conditional on the intensity of the crisis's local salience. The local importance of national issues can affect both voter and elite behavior. For instance, Grose and Oppenheimer (2007) show that the local salience of the Iraq War—measured using a count of constituent war deaths—served as a strong predictor for electoral vote shifts in the 2006 congressional election. Moreover, Milita et al. (2014) find that politicians are more likely to take clear—rather than ambiguous—positions on gay marriage if that topic is especially important to their own constituency.

Following this work, I assume that the intensity of opioid issue salience varies conditionally with the rate of overdose deaths in congressional districts. One of the factors that makes the opioid epidemic a unique public health crisis is its heterogeneous spread throughout the United States. The devastating effects of opioid addiction have been felt most strongly in rural areas of the Northeast—although, more recently, hot spots have cropped up in urban communities of color. Figure 1 depicts state-level deaths by opioid overdose across the United States. Even between geographically proximate states—for instance, New York and Pennsylvania—there are stark differences in the extent to which opioid addiction has taken root. Figure 2 illuminates the scope of within-state opioid overdose variation by contrasting state and county-level overdose rates across New York, Pennsylvania, Vermont, and New Hampshire. I leverage this depicted geographic heterogeneity in opioid deaths to assess if and how this epidemic's local salience impacts politicians' messaging.

Figure 1: State-Level Opioid Overdose Death Rate, 2017–2020

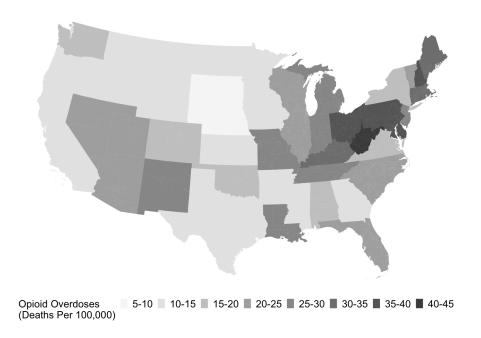
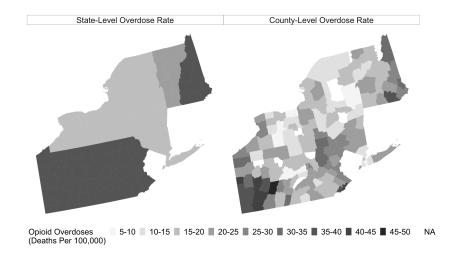


Figure 2: State-Level & County-Level Opioid Overdose Death , 2017-2020 Rate New York, Pennsylvania, Vermont & New Hampshire



Note: Statistics on opioid overdose deaths were drawn from the CDC WONDER online database. Causes of death include death because of a mental or behavioral issue caused by the use of an opioid, accidental poisoning or exposure to an opioid, intentional self-poisoning while using an opioid, and poisoning by an opioid with undetermined intent. Reported state-level death rates are averages that have been produced using data from 2017, 2018, 2019, and 2020. Counties with no reported opioid overdose rates are denoted in white.

Recall, programmatic issues are especially difficult for politicians to communicate because they involve technical, policy-making content with which the average voter is unfamiliar. However, in districts where the opioid epidemic is *locally-salient* salient (i.e., there is a higher rate of opioid deaths), the public should possess a higher level of acquired knowledge about addiction-related issues (Cobb and Kuklinski, 1997). Politicians are also more likely to be held accountable for out-of-step position taking behavior when it concerns issues that matter most to their constituents (Canes-Wrone et al., 2011; Jones, 2011). This is noteworthy given Gramlich's (2018) finding that Americans more often label the opioid crisis as a "pressing problem" when they hail from areas where addiction is highest. Anticipating the potential for electoral accountability, I expect politicians from districts where the epidemic is locally-salient to more frequently focus their opioid messaging on programmatic content.¹

H1: Politicians from areas where the opioid epidemic is *locally-salient* will be more likely to employ "programmatic" messages in their opioid issue text from congressional campaign platforms

I consider "programmatic" facets of opioid messaging to be the kinds of topics identified by the CDC and NIH as the most promising strategies for treating and thwarting opioid use disorder; such solutions include improving prescribing practices, increasing access to treatment services, expanding access to Naloxone for rapid overdose reversal, educating the public about opioid misuse, and bolstering local jurisdictions' public health funding. To illustrate, Barbara Comstock (R-VA) employed this kind of programmatic opioid messaging in her 2018 campaign platform, stating that:

¹I do not assert that voters hold politicians accountable for out-of-step position taking on opioid-related issues. Indeed, there is mixed evidence in the literature concerning to what extent voters hold politicians accountable for their legislative behavior, if at all (Canes-Wrone et al. 2002; Carson et al. 2010; conversely, see Campbell et al. 1960; Converse 1964; Ansolabehere and Jones 2010). My argument rests on the broadly held assumptions that politicians are risk-adverse (Rohde, 1979) and possess deeply-held electoral motivations (Mayhew, 1974). If these assumptions hold true, simply the *potential* for electoral accountability will be enough to motivate the strategic behavior described here.

In 2014, more people died from heroin and other opioid prescription drug overdoses than car accidents within the Commonwealth of Virginia. Congresswoman Comstock recognizes the heroin problem in our community and has worked with federal, state, and local officials on the regional Heroin Operations Team with Loudoun County Sheriff Mike Chapman and the Shenandoah Valley Opioid Taskforce with Winchester Police Chief Kevin Sanzenbacher. Congresswoman Comstock is also a member of The Bipartisan Task Force to Combat the Heroin Epidemic in the U.S. House of Representatives. To combat heroin and opioid addiction we must have a community-focused approach from authorities on all levels of government as well as cooperation from the medical community on curbing the prescription of opioid-based pain relief medications, which in many cases begins the cycle of abuse.

In this example, Representative Comstock clearly advocates for a locally-focused approach to curbing opioid addiction that deals with matters of public health policy. Given that Comstock's congressional district had an especially high rate of opioid overdose death rates in 2018 (36 deaths per 100,000), the text presented here also follows my expectation about the relationship between local issue salience and programmatic opioid messaging.

In districts where the opioid epidemic is not locally-salient (i.e., there is a lower rate of opioid deaths), constituents do not possess the knowledge—or, potentially, interest—to hold politicians accountable. Lacking the same accountability structure outlined above, I expect politicians will appraise the cost of making complex arguments about the programmatic aspects of opioid issues as too steep. Instead, they will use opioid position taking opportunities to tie the epidemic back to familiar issues that are symbolic of partisan values and divisions.

I expect Democrats from constituencies where the opioid epidemic has lower local salience to tie the crisis back to party themes regarding racial equality. Today, the Democratic Party's core constituency could best be described as a coalition of social groups who possess specific policy preferences, chief among them a demand for government to address institutionalized racial prejudice (Grossmann and Hopkins, 2016). With the public spotlight trained on the Black Lives Matter movement, added pressure has been placed on Democrats to make significant strides in reducing inequality within the criminal justice system. Given its ties to mass incarceration and mandatory minimum sentencing, the opioid epidemic provides Democratic

politicians with an excellent opportunity to trumpet party values of racial equity in criminal justice. By using their opioid messaging opportunities to talk about institutionalized racism, politicians can achieve their partisan messaging goals while avoiding the hard work associated with explaining complex policies surrounding opioid issues. It is important to note that—although these discussions have ties to the opioid epidemic—this messaging sits well outside the scope of strategies vital for combating the opioid crisis. These kinds of symbolic, "opioid-adjacent" positions are not intended to advise or educate constituents about public health policy but, rather, serve to fulfill party messaging goals.

 $H2_a$: Democrats from areas where the opioid epidemic is *not locally-salient* will be more likely to employ "symbolic" messages—with a particular focus on criminal justice reform—in their opioid issue text from congressional campaign platforms

In her 2020 campaign platform, Haley Stevens (D-MI) exemplified how Democrats running in districts where the opioid epidemic has lower local salience tie the crisis back to racial equality. Stevens expressed that "[an] approach we must take to curb opioid addiction is decriminalizing marijuana for medicinal and recreational use." She went on to say, "[Marijuana] drug policy and prosecution targets people of color at a disproportionate rate. This form of injustice and inequality is unacceptable..." In this text, Stevens simultaneously takes a position on the opioid epidemic while tying it back to core party values for racial equality. Stevens does not concentrate her messaging on marijuana's potential for alternative pain management as one might in "programmatic" rhetoric on opioids. Instead, Stevens uses opioids as a catalyst to discuss a topic that is particularly important to her party's base and differentiates Democrats from Republicans. Stevens' district in 2020 had an opioid death rate that was just below average (15 deaths per 100,000), tracking with my hypothesis about the relationship between the epidemic's local salience and politicians' messaging tactics.

I expect Republicans from constituencies where the epidemic has lower local salience to tie the opioid crisis back to party themes regarding immigration. Blaming Hispanics and other immigrants for America's problems was a touchstone that defined Donald Trump's 2016 and 2020 presidential campaigns (White, 2016). Party symbols like "Build the Wall" and "America First" harken to values of American traditionalism that are at the core of the Republican Party (Grossmann and Hopkins, 2016; Wallace and Zepeda-Millán, 2020). Party loyalists—who make up a growing proportion of the Republican voter base—tend to gravitate towards issues for which President Trump has taken a strong stance; and they expect other party members to hold the line with their perceived party leader (Barber and Pope, 2019). Framing the opioid epidemic as a problem that can be resolved at the U.S.-Mexico border gives Republican politicians a clear opportunity to demonstrate their party loyalty while avoiding the hard work associated with messaging on programmatic aspects of the opioid crisis. Although "supply-side" solutions to the opioid epidemic may serve to help Republicans achieve their party messaging goals, such approaches have had little impact on turning the tide of opioid addiction in America (Grogan et al., 2020).

 $\mathrm{H2}_{b}$: Republicans from areas where the opioid epidemic is not locally-salient will be more likely to employ "symbolic" opioid messages—with a particular focus on U.S.-Mexico immigration—in their opioid issue text from campaign platforms

In his 2018 congressional campaign platform, Raúl Labrador (R-ID) exemplified how Republican politicians from districts with lower opioid salience use the crisis as a vehicle to take symbolic, party positions on security at the U.S.-Mexico border and, moreover, "illegal" immigration—a topic that never fails to rile up the party base. Labrador wrote to constituents that, "the borders are not secure...this dysfunction allows drug smugglers to creep into the U.S. and exacerbate the opioid epidemic." He went on to discuss how "illegal aliens" take American jobs and "depress wages for workers here at home," signing off by

noting "that is not putting America first." This messaging behavior follows my hypothesis given that the opioid overdose rate in the Idaho 1st was not especially high in 2018 (17 deaths per 100,000).

What politicians say and how they say it matters. Pollock et al. (1993) and Grose et al. (2015) show that the rhetorical frames elites use to explain their position taking behavior can have strong impacts on constituents' political knowledge and opinions. In particular, McGinty et al. (2016) find that politicians contribute to the persistent stigma surrounding opioid use disorder and discourage treatment-seeking behavior when they frame addiction as an illegal behavior. Sensationalized messages about the "criminal" aspects of the opioid crisis are also more likely to be picked up by the media (Russell et al., 2020), perpetuating false stereotypes and spreading misinformation about drug abuse (Lewandowsky et al., 2017). The idea that politicians' messaging colors public perception—both directly through their own communications and indirectly by way of the media—is worrisome under my theory for opioid issue salience. If politicians do indeed use their opioid position taking opportunities to message on other partisan issues—in particular, criminal justice and border security—this rhetoric could contribute to growing hesitancy towards addiction treatment and further exacerbate America's opioid crisis.

Data: Congressional Campaign Websites

Politicians today can take positions across any number of traditional or digital campaigning outlets. This makes measuring politicians' messaging on opioids difficult because elites could bring up opioid issues on one communication platform but fail to mention these same issues on another. To best assess politicians' opioid positions, I employ an original collection of policy platforms taken from candidate campaign websites across the 2018 and 2020 congressional elections. According to Druckman et al. (2009, p. 345), candidate campaign websites are a uniquely ideal form of data for studying politicians' issue positions because they are "unmediated (i.e., directly from the campaign), complete (i.e., covering a full range of rhetor-

ical strategies), and representative of the population of campaigns." A bevy of studies point to web-based policy platforms as a strong summary of candidates' campaign position taking behavior. For example, in their early examination of the issue types and topic frames candidates employ on their sites, Xenos and Foot (2005) show that politicians' online behavior is more politics "as usual" than politics "unusual." This follows Sulkin et al.'s (2007) finding that candidates' online campaign platforms are a strong reflection of positions taken across more traditional campaigning outlets (e.g. televised advertisements). Druckman et al. (2010) similarly demonstrate that candidates do not adopt a laundry list of issues in their campaign platforms but, rather, strategically choose to highlight issues-of-the-day.

To collect text data from candidate campaign websites, I identified the names of all major party candidates who ran for Congress in 2018 and 2020 were using candidate filings with the Federal Election Commission (FEC). Using this list of candidate names, I identified campaign website URLs for all available candidates in each election year. This list of campaign websites was next filtered to include only those that contained a platform of policy positions. I then extracted this position taking text using a combination of automated text collection (i.e., extraction with a pre-programmed web scraper) and manual downloading (i.e., copy and pasting). Of the 3,959 primary and general election candidates who ran across 2018 and 2020, nearly 75% had a campaign website that included a policy platform.² Limiting scope to include only politicians who had a reasonable shot at winning, nearly 80% of viable candidates had a campaign website.³

A small group of candidates running in the 2018 and 2020 primaries either had no official campaign website or, if they did adopt a website, did not outline any policy positions on that site. To determine if certain kinds of candidates were more likely to adopt campaign

²Per Banda and Carsey (2015), candidates should be uniform in their messaging from the primary to the general election. Porter et al. (2020) quantitatively demonstrate that congressional candidate campaign platforms do not vary widely across the two stages of elections. Therefore, including primary candidates to increase my sample of cases examined should not affect the generalizability of my findings.

 $^{^{3}}$ Following Bonica (2014) I define viable candidates as those politicians who raise more than \$0 during their campaign for Congress and garnered enough votes to fall within a twenty-point margin of the top vote-getter in their primary election.

Table 1: Main Indicators for Missingness in Policy Platform Adoption

	DV: Presence of Policy Platform
Less Than 5% Vote-Share	-1.016^*
	(0.108)
Past Political Experience: Congressional Incumbent	0.668*
-	(0.142)
Open Race	0.387^{*}
	(0.098)
District Partisanship: Two-Party Competitive	0.551^{*}
· · · · · · · · · · · · · · · · · · ·	(0.117)
Constant	1.229*
	(0.105)
Observations	3,959
Note:	*p<0.05

platforms than others, I regress policy platform presence on a series of candidate characteristics and election-level covariates. The truncated results of this logistic regression, which are presented in Table 1, outline the main predictors for the presence or absence of an online campaign platform. The full model for this analysis can be found in Table A1 of the appendix. Similar to Porter et al. (2020), I find that trends in website adoption follow predictable patterns for strategic campaign behavior widely cited in literature on congressional elections. Campaign platform adoption was weakest among candidates who garnered less than 5% of the vote-share in their partisan primary election. Generally, these kinds of poor performing candidates lack any official campaign presence—online or otherwise—so a missing website is not so surprising. Members of Congress were especially likely to have a list of issue priorities on their campaign websites; these incumbent are well-seasoned candidates with abundant electoral resources, so a high rate of web-based policy platform adoption among this candidate group is to be expected. Candidates who ran in open races or contests with steep two-party competition were also more likely to possess a campaign platform.

Table 2: Percentage of Candidates Discussing Symbolic & Programmatic Issues, 2018–2020

	Democratic		Republican	
Issue Type	2018	2020	2018	2020
Opioid Epidemic	38.1%	31.1%	32.6%	27.3%
Programmatic Issues				
Improvements to American Infrastructure	23.5%	27.3%	14.0%	16.0%
Military Presence in Middle East	28.6%	26.7%	41.3%	29.5%
Infectious Diseases (COVID-19, Ebola, Zika)	23.7%	46.5%	9.2%	30.0%
Symbolic Issues				
Women's Reproductive Choices	47.1%	45.3%	47.7%	50.6%
Detention & Deportation of Immigrants	40.8%	44.0%	43.3%	49.5%
Law Enforcement & Policing	30.1%	47.4%	21.9%	28.1%

Note: Infrastructure includes statements that explicitly mention physical building or construction. Middle East includes statements about U.S. presence in Iraq and Afghanistan. Infectious Diseases includes discussions of Covid-19, Ebola, and Zika viruses; it does not include statements about HIV/AIDS. Women's Reproductive Choices includes only explicit stances on abortion constitutionality and access. Detention & Deportation deals with the Trump administration's family separation policy. Law Enforcement includes statements about police force training and funding. Example text can be on pages 3 through 5 of the included appendix.

Candidates who emerge in these kinds of races tend to be especially strategic (Jacobson and Kernell, 1983), choosing to run when their chances of electoral success are heightened. Strategic politicians make every effort to professionalize their campaigns, so a higher rate of campaign platform adoption is also to be expected.

Identifying Opioid Positions in Campaign Platforms

I consider a candidate to have discussed issues related to the opioid epidemic if the crisis is explicitly mentioned in their campaign platform text. Given that over 75% of drug-related overdoses between 2018 and 2020 involved an opioid, I consider any broad platform discussions of drug addiction to be opioid-related text. I also consider platform points that referenced the trafficking of drugs like heroin or fentanyl to be opioid-related text. Across the 2,925 congressional candidates who had a policy platform on their website, 950 or 32% discussed opioid-related issues. Placing this statistic in perspective, Table 2 outlines the proportion of candidates who took up into their platforms a selection of other "symbolic"

Table 3: Main Indicators for Opioid Issue Adoption on Congressional Campaign Website, 2018-2020

	DV: Presence of Opioid Position
Rate of Opioid Overdose by CD	0.043*
	(0.006)
Candidate Party: Republican	-0.238^*
	(0.083)
% of Constituency, White	0.014^{*}
	(0.003)
% of Constituency, 100k+ Household Income	-0.016^{*}
	(0.004)
Year: 2020	-0.210^{*}
	(0.090)
Constant	-1.764^{*}
	(0.641)
Observations	2,444
Note:	*p<0.05

Note: p < 0.05

and "programmatic" issues. There is clear variation in issue uptake within and across policy domains; of particular note are topics like *Infectious Diseases* and *Law Enforcement*. In tandem with these issues' increased salience from 2018 to 2020, a greater proportion of candidates chose to adopt these topics into their campaign platforms. Overall, the rate at which candidates adopted opioid issues in their online policy platforms tracks well with other nationally-salient symbolic and programmatic issues. This suggests that candidates do in fact perceive the opioid epidemic to be an issue that is worthy of public position taking.

To discern whether certain candidates were more likely to adopt opioid positions in their platforms, I regress opioid issue presence over a set of electoral, district, and personal candidate characteristics; these include a candidate's past political experience, district educational attainment, and district two-party electoral competitiveness. The key independent variable in this model is a measure for the rate of opioid overdose deaths per 100,000 at the congres-

sional district level. Truncated results for this analysis are shown in Table 3; the full results for this analysis are presented in Table A2. I find that a district's rate of overdose deaths serves as a statistically significant predictor of opioid issue uptake—but this relationship is substantively weak. Moving from the first quartile to the third quartile of the district-level distribution over opioid deaths increases the predicted probability of issue uptake by only 8%. These cursory analyses should assuage concerns about widespread bias in the propensity at which candidates take up opioid issues into their congressional campaign platforms.

Preprocessing Campaign Platform Text

To prepare text from congressional campaign platforms for modeling, I took several preprocessing steps standard in text analysis (Grimmer and Stewart, 2013). First, I cleaned the text of any HTML tags and extraneous source code. Second, I removed any stop words—commonly used words such as "the," "a," or "in" that have no substantive meaning but rather serve a purely grammatical function. Next, I discarded punctuation, numbers, and removed capitalization. I additionally simplified my policy platform vocabulary by stemming words, which removes word endings to reduce the dimensionality of text. For instance, using stemming, words like legislative, legislator, and legislation would simplify to legislat-. Finally, I removed infrequent words, dropping any terms that did not appear in at least two policy platform documents. Grimmer and Stewart (2013) additionally note that, "discarding text not related to the primary quantity of interest can actually improve the performance of automated clustering methods." Therefore, policy platform documents in my analysis were trimmed to only include opioid-related text. These pre-processing steps yielded a corpus of 950 documents and a vocabulary with 1,859 unique words.

Method: Keyword-Assisted Topic Model (keyATM)

With the proliferation of easy-to-obtain text data, statistical models have become an increasingly popular way to analyze large document collections. Automated statistical approaches

make analyzing text cheaper, more accessible, and less time-intensive (Fan et al., 2014). In particular, topic modeling has become a notable staple among methods for quantitative content analysis. Probabilistic topic models are widely used to uncover or "infer" latent topics within a text. These kinds of fully automated methods for topic discovery provide an efficient means for exploring text when knowledge about the underlying contents is limited. However, as a mode for hypothesis testing, these kinds of "unsupervised" topic models present significant limitations. Model-generated topics often lack interpretability, reflect duplicate textual themes, or combine different themes into a single topic (Chang et al., 2009; Tang et al., 2014). Moreover, no substantive input can be incorporated in the definition of topics to assess the prevalence of specific quantities of interest. When topic models are relied upon for measurement purposes, these obstacles hinder researchers' ability to explicitly test whether their theoretical expectations are borne out in the data.

For these reasons, I employ a semi-supervised keyword-assisted topic model (keyATM) developed by Eshima et al. (2021) to conduct my analysis. This method for topic modeling allows for both the exploration of latent topics within a text as well as the specification of topics of interest using a small number of keywords. Per Eshima et al. (2021), this allows for researchers to "analyze textual data to test hypotheses about pre-defined concepts derived from substantive theories empirically" (p.38). Briefly, conventional methods for topic discovery that rely on latent Dirichlet allocation (LDA) as a statistical generative model assume that documents convey an admixture of topics, and define each topic as a single distribution over words. In keyATM, topics are, instead, defined as a mixture of two distributions: the first is defined over all words in a vocabulary, and the second is defined exclusively over user-defined keywords. These distributions represent the relative frequency of each word within a topic. Given that keywords belong to a much smaller vocabulary, prior means for the frequency of user-selected keywords are greater than those of non-keywords in the same topic. Put plainly, this mixture structure places "greater importance on keywords a priori while allowing the model to learn from the data about the

precise degree to which keywords matter for a given topic" (Eshima et al. 2021, p. 6). Using both qualitative and quantitative metrics, Eshima et al. (2021) demonstrate that keyATM yields more interpretable topics and achieves a better document classification performance than do LDA-reliant models for topic discovery.

The inclusion of topic-specific keywords is especially important for my purposes because it allows me to directly test my expectations about the prevalence of politicians' programmatic and symbolic messaging rhetoric. Recall, I expect candidates from congressional districts where the epidemic is *locally-salient* to focus their opioid issue positions on topics that directly relate to the addiction crisis as it pertains to their own constituency. In contrast, I expect politicians from districts where the epidemic is *not locally-salient* to use their opioid platform text as a vehicle to talk about issues that serve as partisan touchstones—in particular, U.S.-Mexico border security (Republicans) and criminal justice reform (Democrats)—which have only loose connections to America's opioid epidemic. Pairing keyword-defined topics with a document-level covariate for opioid deaths by congressional district, I evaluate the association between the opioid crisis's local salience and politicians' use of symbolic or programmatic opioid issue frames.

To select keywords for topic definitions, I turn to official party platforms from 2016 and 2020. The Democratic and Republican Party both explicitly discussed opioid addiction within dedicated sections of their party platforms.⁴ I identify the most frequently occurring words in these programmatic discussions of the opioid crisis and employ them in my keyword model definitions. For my Democrat "programmatic" opioid frame, keywords include: public, health, care, and medic-; for my Republican "programmatic" frame, keywords include: combat, educ-, local, and resourc-. These frames align with existing expectations in the literature about partisan differences in messaging on opioids, where Republican see localized opioid resource management as central to resolving addiction and Democrats view publicly

⁴In 2020, the Republican Party did not ratify a new policy platform and adjourned the RNC choosing, instead, to "strongly" support President Trump's America First agenda. Because of this, platform text from only the 2016 Republican Party Platform was used to generate possible keywords.

funded opioid rehabilitation as the most effective means for reducing addiction. Interestingly, both parties also explicitly reference the opioid crisis in their platform text on criminal justice (Democrats) and U.S.-Mexico immigration (Republicans). Similar to above, I identify the most frequently occurring words in these symbolic opioid texts and employ them in my model keyword definitions. For my Democrat, "symbolic" opioid frame, keywords include: prison, polici-, justic-, and crimin-; for my Republican "symbolic" frame, keywords include: traffick-, border, secur-, and cartel. The relative prevalences of keywords in my campaign platform corpus are graphically displayed in appendix Figure A1.

Modeling Opioid Position Taking

The primary predictor in my analysis is a measure for the local salience of opioid issues in congressional districts. I assume that the intensity of the epidemic's local salience varies conditionally with district opioid death rates, where a higher district overdose rate indicates higher local issue salience. Determining the rate of opioid overdoses at the congressional district-level is complicated by incongruent data. The CDC only provides statistics on opioid overdoses at the county-level; in addition, about a quarter of all U.S. counties failed to report opioid death rates from 2018 to 2020. To estimate congressional district-level overdose rates, I pair available county-level data with a method for areal weighted interpolation. This technique uses known quantities (i.e. county death rates) to estimate values for overlapping, but incongruent, polygon features (i.e. congressional districts). I specifically employ intensive areal interpolation, where county data is weighted based its areal intersection with congressional districts.⁵ Areal interpolation, though, relies on a significant assumption that populations are spread evenly across counties—this does not translate well to real-world contexts because population density can drastically vary within a constrained space. Violating this assumption induces unpredictable statistical bias into my district-level estimates, which

⁵For more details on weighting implementation, see Prener (2020).

could have downstream impacts on the results of hypothesis testing.⁶

To mitigate measurement error, I transform this continuous measure for opioid overdoses into a dichotomous variable; if a congressional district has more than 21 opioid deaths per 100,000 constituents (75th percentile of the 2018-2020 county-level distribution for opioid overdose rates), I consider opioid issues to be *locally-salient* within that constituency. I find that this congressional district categorization varies minimally with alternative measures for the local salience of opioid issues.⁷ These efforts should provide some assurance that estimates produced using areal weighted interpolation present a reasonably accurate picture of congressional district opioid death rates and, moreover, the local salience of opioid issues. In addition to this binary indicator for local issue salience, I include in my model a measure for candidate past political experience, district proximity to the southern border, percent of population with a high school diploma, and candidate partisanship.

Results: Opioid Messaging in Policy Platforms

To assess the relationship between the opioid epidemic's local salience and politicians' messaging tactics, I estimate a keyword-assisted topic model with four keyword-defined topics and two non-keyword topic.⁸ The word stems that have the highest probabilities of belonging to each of these six topics are denoted in Table 4; pre-defined keywords are bolded for reference. Columns 1 through 4 denote keyword-defined topics; columns 5 and 6 denote latent topics identified by the model with no provided keywords. In reviewing platform text classification, I find that documents with high probabilities of specific topic membership do

⁶The reality that population density varies within counties is problematic for areal weighted interpolation. If density is consistent, then the boundaries of counties are inconsequential to estimations. If density *is not* consistent, then changing county boundaries could yield different district estimates. This dilemma is called the modifiable areal unit problem (MAUP). For a more complete description, see Curiel and Steelman (2019).

⁷When classifying districts using estimates generated with only complete counties (i.e., counties that are not intersected by multiple congressional districts), percent agreement across estimate types is 82%. When comparing my district-level classification to state-level overdose rates, percent agreement across is 77%.

⁸To check model convergence, I assess the log-likelihood of all \hat{r} values across 3,000 model iterations; these values indicate convergence to a stationary distribution. I also find that a, the prior for the document-topic distribution, stabilizes across all topics, indicating that my keyATM model is working as expected.

Table 4: Top Words Associated With Topics Defined by Keyword-Assisted Topic Model

Democratic I	Party Topics	Republican Party Topics		Model Generated	
Criminal Justice (Opioid-Adjacent)	Treatment (Opioid-Specific)	Border Security (Opioid-Adjacent)	Local Resources (Opioid-Specific)	Topic #1	Topic #2
drug system crimin	addict treatment health	border secur immigr	law resourc enforc	marijuana legal cannabi	drug need problem
war justic prison	support prevent program	illeg wall southern	educ combat local	tax decrimin recreat	crisi epidem famili
reform crime polici incarcer	access medic care patient	drug law traffick america	state communiti support fund	schedul possess prohibit revenu	respons american live help

Note: Word stems were identified as having the highest relative probability of topic association. Bolded stems are keywords specified before model fitting; keywords were identified using national party platform text. Replicating this same topic estimation procedure using a structural topic model, where no keywords are provided, produces less satisfactory topics. Topical differences across my keyATM and alternative STM are available in Table A3.

substantively reflect those identified topical themes. For example, Haley Stevens' 2020 platform text—which used the opioid epidemic to message on racial bias in criminal justice—was identified by my keyword-assisted model as being largely composed of the symbolic *Criminal Justice* topic (θ =0.59). The model similarly identified Raúl Labrador's 2018 policy platform point on opioid drug trafficking—which morphed into a discussion of U.S.-Mexico immigration—as chiefly belonging to the symbolic *Border Security* topic (θ =0.82). The fact that these exemplary cases reflect high incidences of pertinent topics provides some base validity for the substantive quality of model topics.

Predicted probabilities with 95% credible intervals for average topical proportions in candidates' opioid-related text are presented in Figures 3 and 4. Following my hypothesis, I find that Republican candidates who ran in districts where the opioid epidemic was not locally-salient more often used the epidemic as a vehicle to discuss "illegal" activities at the U.S.-Mexico border and, consequently, the need for more stringent immigration policies. Per the left column of plots in Figure 3, these Republican incumbents (+15%) and challengers

 $^{^{9}\}mathrm{A}$ selection of other platform texts that included a relatively high proportion of words associated with each topic can be found in appendix section 2.

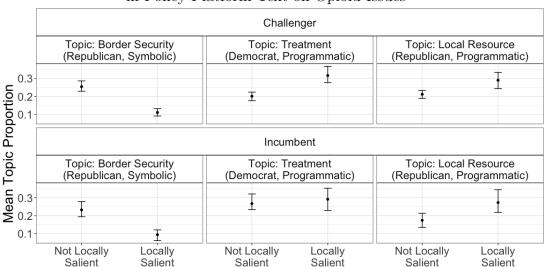


Figure 3: Predicted Probabilities for Republicans' Topical Content Proportions in Policy Platform Text on Opioid Issues

Note: Districts where the opioid epidemic is "Not Locally Salient" are congressional districts with an opioid overdose death rate of less than 21 per 100,000. "Locally Salient congressional districts are areas with an opioid overdose death rate of greater than or equal to 21 per 100,000. Predicted probabilities for mean topic proportions in platform text were generated using simulated data. Candidate past political experience and local opioid issue salience are varied; all other covariates are held at their mean value. The keyATM model was estimated over both Democratic and Republican policy platform text. Covariates for congressional district opioid salience and candidate type were both interacted with candidate partisanship. Error bars reflect 95% credible intervals. Additional predicted probability plots depicting Republican candidates' coverage of all omitted topics are presented in Figure A2.

(+14%) dedicated a statistically significantly greater proportion of their opioid platform text to the symbolic Border Security rhetorical frame than their counterparts who hailed from districts where the epidemic had higher local salience. Republicans from districts where the opioid epidemic was locally-salient chose to prioritize discussions of public health funding in their platforms, emphasizing the importance of equipping law enforcement with the vital tools and training they need to handle opioid addiction in local communities. Turning to the right column of plots Figure 3, These incumbents (+10%) and challengers (+8%) dedicated a statistically significantly greater proportion of their opioid text to the programmatic Local Resource frame than Republicans from districts where the epidemic lacked local salience.

My results in Figure 4 indicate a similar relationship between local issue salience and messaging rhetoric among Democratic members of Congress. Democrat incumbents from dis-

Challenger Topic: Criminal Justice Topic: Treatment Topic: Local Resource (Republican, Programmatic) (Democrat, Symbolic) (Democrat, Programmatic) 0.5 Ŧ Ŧ 0.4 Mean Topic Proportion 7.5.0 0.3.0 0. Ŧ Ŧ Ŧ ₹ Incumbent Topic: Criminal Justice Topic: Treatment Topic: Local Resource (Democrat, Programmatic) (Democrat, Symbolic) (Republican, Programmatic) Ŧ Ŧ Ŧ Ŧ 0.2 0.1 Not Locally Not Locally Not Locally Locally Locally Locally Salient Salient Salient Salient Salient Salient

Figure 4: Predicted Probabilities for Democrats' Topical Content Proportions, in Policy Platform Text on Opioid Issues

Note: Districts where the opioid epidemic is "Not Locally Salient" are congressional districts with an opioid overdose death rate of less than 21 per 100,000. "Locally Salient congressional districts are areas with an opioid overdose death rate of greater than or equal to 21 per 100,000. Predicted probabilities for mean topic proportions in platform text were generated using simulated data. Candidate past political experience and local opioid issue salience are varied; all other covariates are held at their mean value. The keyATM model was estimated over both Democratic and Republican policy platform text. Covariates for congressional district opioid salience and candidate type were both interacted with candidate partisanship. Error bars reflect 95% credible intervals. Additional predicted probability plots depicting Republican candidates' coverage of all omitted topics are presented in Figure A3.

tricts where the opioid crisis was locally-salient dedicated a statistically significantly greater proportion of their opioid platform text to discussions of addiction treatment access. These incumbents employed the programmatic Treatment frame (Figure 4, middle column, bottom pane) more often than their counterparts (+17%) in districts where the epidemic was not locally-salient. On the other end of the spectrum, incumbent Democrats from congressional districts where the opioid epidemic did not have local salience were statistically significantly more likely (+10%) to employ the symbolic $Criminal\ Justice$ frame; these candidate more often chose to forgo the difficult task of messaging on "hard" opioid issues to, instead, focus their rhetoric on racial inequality within the criminal justice system. Among Democratic challengers, no relationship was identified between local opioid salience and candidates'

rhetorical content in campaign platform text.

These results demonstrate a clear relationship between incumbents' messaging tactics and the local salience of America's opioid crisis. Candidates who ran in districts where the epidemic was locally-salient in 2018 and 2020 tended to concentrate their messaging on the kinds of public health solutions for opioid abuse disorder endorsed by the CDC and NIH. The vast majority of candidates, however, ran in districts where the epidemic was not locally salient and, instead, focused their messaging on party-defining topics with only loose ties to opioids. When elites conflate the opioid crisis with partisan issues—like criminal justice or immigration—they sell short the severity of opioid addiction in America. Moreover, when opioid addiction is framed as an illegal behavior, Americans are more likely to perceive opioid addiction as an illegal activity rather than a treatable health condition (McGinty et al., 2016); such beliefs contribute to a pervasive stigma against addiction treatment, especially among vulnerable populations and communities of color (Lawson et al., 2021).

Opioid Issue Messaging in Congress

Incumbents' opioid messaging tactics should be most impactful on public opinion if they are echoed in legislative communications. Campaign position taking offers researchers important insight into elites' strategic calculus; but legislative positions have broader, real-world impacts—especially as it pertains to shaping public discourse through the media. With the decline of state and local media organizations, public statements made by legislators have become a go-to source for journalists, who readily employ these texts in their political reporting (Hopkins, 2018; Darr et al., 2018). Grimmer (2013b), in particular, finds that local newspaper articles can sometimes constitute word-for-word recapitulations of congressional incumbents' press releases. At the national level, Lawson and Meyers (2020) show that quotes from members of Congress are among the most-cited sources of opioid "expert" opinion in The New York Times. Finally, Russell et al. (2019) demonstrate that "law and order" frames are most widely adopted in media coverage of the opioid epidemic when they

are purported by elected officials. For all these reasons, I turn to legislative position taking text to better grasp the broader implications of my findings.

A large body of scholarship finds that congressional campaign platforms well-encapsulate the scope and depth of issues a candidate covers in her congressional campaign (e.g. Xenos and Foot 2005; Druckman et al. 2009; Sulkin et al. 2007). Unfortunately, no such equivalent exists for legislative position taking. Members of Congress tailor explanations of their work in Washington to their audience (e.g. Grimmer 2013a). As such, using a single source of text to measure legislative position taking would fail to capture the full scope of rhetorical strategies a politician might use to discuss opioid-related issues. Therefore, to broadly assess the contents of incumbents' legislative opioid positions, I evaluate the topical content of texts from congressional floor speeches, press releases, and bill summaries.

Comparing the contents of different legislative corpora using quantitative approaches is not as straightforward as it may seem. Methodological limitations have impeded researchers' ability to measure common quantities of interest across multiple, large-scale sources of text using topic models. Existing methods for topic discovery assume that all documents employed in a given model's estimation are generated using a common model for language; but such an assumption is not appropriate for many text analysis problems. For instance, although a proposed bill and a floor speech about that same bill concern identical topics, these documents employ language in fundamentally different ways. References to parliamentary procedure common in floor speeches would be uncommon in bill text, and formal citations of United States Code present in bills would be largely absent from floor speeches. Because of their linguistic inconsistencies, employing these texts in the same topic model could yield low quality topics. Estimating separate models for each type of corpora presents its own challenges; in particular, there is no guarantee that generated topics will be consistent enough across models to facilitate content comparisons across texts. This methodological trade-off has deterred researchers from using high volumes of text data to quantitatively assess if and how the contents of politicians' messages vary across avenues for legislative position taking.

Method: Multi-Corpora Topic Modeling (multi-keyATM)

To circumvent obstacles for multi-corpora topic estimation endemic to existing methods for quantitative text analysis, I employ a novel method for topic modeling developed by Porter, Olivella, and Imai (2021). This "multi-keyATM" approach extends the method for keyword-assisted topic modeling employed in my previous analysis. Recall, in keyATM, as proposed by Eshima et al. (2021), topics are defined as a mixture of two distributions: the first distribution is defined exclusively over user-specified keywords; the second is defined over all words in a corpus vocabulary. Porter, Olivella, and Imai's (2021) multi-corpora topic model adapts this mixture structure, such that the distribution over keywords for a given topic remains constant across corpora, and the topic-word distribution over all words for that topic varies across corpora. This modified mixture structure connects texts from different document collections through a shared topic without forcing that topic's content to be exactly the same across sources. In this way, multi-keyATM allows for topics to be estimated simultaneously in a single model without making the unrealistic assumption that all sources employed in model estimation have the same data generating process.

To more formally outline the differences between multi-corpora and standard keyATM, suppose we wanted to classify the topical content of two corpora (A and B). To determine topic-word assignment in keyATM, for each word in each document $(w_{d,i})$ a topic is drawn from a categorical distribution $(z_{d,i} \sim \text{Cat}(\boldsymbol{\theta}_d))$. If this topic z is a non-keyword topic, then topic-word assignment follows a routine similar to latent Dirichlet allocation (for a more detailed explanation, see Roberts et al. 2014). If this topic z is a keyword topic, a Bernoulli random variable $(s_{d,i})$ is drawn to determine which of z's topic-word distributions word $w_{d,i}$ will be sampled from: the topic's distribution over all words $(w_{d,i}|z_{d,i} \sim \text{Cat}(\boldsymbol{\phi}^{s_{d,i}=0}_{z_{d,i}}))$ or the topic's distribution over keywords $(w_{d,i}|z_{d,i} \sim \text{Cat}(\boldsymbol{\phi}^{s_{d,i}=1}_{z_{d,i}}))$. Porter, Olivella, and Imai's (2021) powerful multi-keyATM extension capitalizes on this definition of topics as a mixture to allow for linguistic differences in the content of topics that are shared by corpus A and B. Under multi-keyATM, a topic's distribution over keywords is identical across corpora $(\tilde{\boldsymbol{\phi}}_{z_{d^A,i}})$

vs. $\tilde{\phi}_{z_{dB,i}}$); this shared distribution allows text from different sources to be estimated across a common space—an approach analogous to scaling methods for ideal point estimation. The second distribution for a topic is defined over the full vocabulary for all corpora but probabilities for topic-word assignment are unique to each corpus ($\phi_{z_{dA,i}}^A$ vs. $\phi_{z_{dB,i}}^B$); this allows for corpus-specific variation in the semantic composition of topics that are shared across corpora, thus accommodating differences in models for language between documents.

Data Preparation & Model Covariates

To maintain continuity, I use the same text pre-processing procedure that was employed in my prior analysis to prepare my legislative text for modeling; these steps yielded a multicorpus collection of 1,203 press releases, 263 floor speeches, and 324 bill proposals from the 115th and 116th Congresses. To produce the findings presented below, I include two covariates in my estimation for corpora topical content. I include an indicator variable for local opioid issues salience; where opioid issues are considered to be especially salient within a constituency if that congressional district had more than 21 opioid deaths per 100,000 constituents (75th percentile of the 2018-2020 county-level distribution over opioid overdose rates). This measure for opioid issue salience is interacted with a binary indicator for candidate partisanship. The user-specified keywords that define my programmatic keyword topics (i.e. Treatment and Local Resources) and symbolic keyword topics (i.e. Criminal Justice and Border Security) are identical to those employed in my analysis of campaign platform text. In addition to these four keyword topics, I allow for the estimation of two non-keyword, corpus-specific topics in my multi-corpora model.

Results: Opioid Messaging in Legislative Texts

The word stems that have the highest probabilities of belonging to each of those six topics defined in my multi-corpora model are denoted in Table 5; pre-defined keywords are bolded

for reference. Columns 1 through 4 denote keyword-defined topics; the set of corpus-specific latent topics identified by my model have been omitted for presentational purposes.¹⁰ Although incidences of keywords in Table 5 are weaker than those in my previous analysis for campaign platform text, broad topical themes regarding criminal justice (column 1), border security (column 2), and opioid use disorder treatment (column 3) are still well-reflected by those word stems outlined in Table 5. A lack of support in these legislative text data for the Republican, programmatic *Local Resource* topic is evident through in the absence of model-defined keywords in column 4, and this topic's shifting semantic content across corpora. Nevertheless, those topics defined in columns 1 through 3 provide me with sufficient leverage to assess whether members of Congress from districts with lower local opioid salience are more likely to employ symbolic topics in their legislative messaging text; and, further, if members of Congress from districts with higher local opioid salience more often employ programmatic issue frames.

Predicted probabilities with 95% credible intervals for average topical proportions in candidates' opioid-related text are presented in Figure 5 (Republican legislative text) and Figure 6 (Democratic legislative text). Plots are faceted by keyword topic to facilitate comparisons in the mean topical content of legislative texts across levels of district opioid salience (denoted by point shapes) and corpus type (denoted on the x-axis). Several noteworthy relationships are apparent in these legislative text data. First, with respect to the programmatic Treatment topic, floor speech and bill texts generated by incumbents who represent constituencies in "Not Locally Salient" districts are statistically indistinguishable from those text generated by incumbents who represented "Locally Salient." That is to say, Republican and Democratic incumbents in the 115th and 116th Congresses dedicated similar amounts of their floor speech and bill texts to discussions of opioid addiction treatment. Commonalities in the topical contents of floor speech and bill summary texts for incumbents in both district types are also evident in Republicans' discussions of Border Security (Figure 5, left panel)

¹⁰An extended list of top words and words associated with corpus-specific topics is available in Table A4 of the included appendix.

Table 5: Top Words Associated With Topics Defined By Multi-KeyATM

Press Releases

Democratic Party Topics		Republican	Republican Party Topics	
Criminal Justice	Treatment	Border Security	Local Resources	
(Programmatic)	(Symbolic)	(Programmatic)	(Symbolic)	
law	opioid	border	opioid	
polici	$\stackrel{ ext{health}}{ ext{health}}$	secur	bill	
enforc	$\operatorname{support}$	illeg	act	
justic	fund	presid	legisl	
marijuana	$\operatorname{program}$	${f traffick}$	bipartisan	

Floor Speeches

Democratic Party Topics		Republican	Republican Party Topics	
Criminal Justice	Treatment	Border Security	Local Resources	
(Programmatic)	(Symbolic)	(Programmatic)	(Symbolic)	
legal	treatment	border	drug	
substanc	\mathbf{medic}	secur	bill	
schedul	program	presid	committe	
law	provid	come	chairman	
justic	communiti	immigr	legisl	

Proposed Bill Summaries

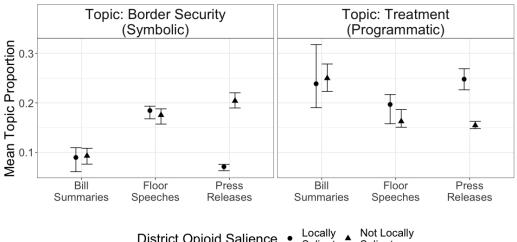
Democratic Party Topics		Republican	Republican Party Topics	
Criminal Justice (Programmatic)	Treatment (Symbolic)	Border Security (Programmatic)	Local Resources (Symbolic)	
reduc establish crimin cannabi schedul	medic program treatment health state	border law traffick secur hous	prescrib drug opioid requir bill	

Note: Word stems were identified as having the highest relative probability of topic association. Bolded stems are keywords specified before model fitting. An extended list of top words and words associated with corpus-specific topics is available in Table A4.

and Democrats' discussions of *Criminal Justice* (Figure 6, left panel).

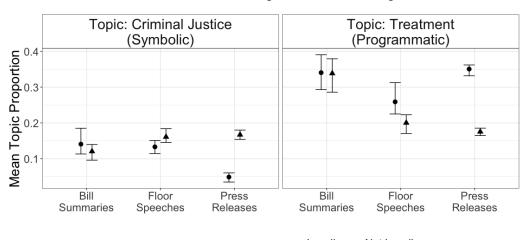
Divergence in the topical content of legislative position taking texts are most evident in members' press releases. Democratic incumbents representing constituencies where the opioid epidemic was not locally salient employed symbolic discussions of $Criminal\ Justice$ significantly more often (+12%) than incumbent Democrats representing districts with high rates of opioid overdose deaths. Similarly, Republican members of Congress representing constituencies where opioid issue had lower local salience employed symbolic discussions of $Border\ Security$ significantly more often (+13%) than incumbent Republicans from districts

Figure 5: Republican Legislative Text on Opioid Issues, Predicted Probabilities for Topical Content Proportions



District Opioid Salience Salient

Figure 6: Democratic Legislative Text on Opioid Issues, Predicted Probabilities for Topical Content Proportions



Locally Not Locally District Opioid Salience

Note: Predicted probabilities for mean topic proportions of topical content in incumbents' legislative texts were generated using simulated data. Error bars reflect 95% credible intervals. Districts were the opioid epidemic was "Not Locally Salient" include congressional districts with an opioid overdose death rate of less than 21 per 100,000; "Locally Salient" congressional districts are those with an opioid overdose death rate of greater than or equal to 21 per 100,000.

when the epidemic was locally-salient. Moreover, Democratic (-18%) and Republican (-9%) legislators representing lower salience constituencies dedicated statistically significantly less of their campaign platform texts to programmatic discussions surrounding the Treatment topic than did their counterparts representing constituencies where the opioid crisis is locally salient. These findings suggest that politicians deliberately re-frame their position taking on opioids in legislative texts are the most public-facing. Given press releases' deep ties to journalists' accounts of political news, the implications of my findings paint a grim picture for the role elites play in perpetuating harmful stigmas about addiction.

Discussion & Conclusion

Pairing quantitative methods for content analysis with original collections of text data on elites' campaign and legislative position taking behavior, I find that the local salience of the opioid crisis is highly predictive of politicians' messaging behavior. I demonstrate that candidates from districts with a relatively high rate of opioid deaths tend to focus their opioid issue positions on CDC-endorsed public health solutions for opioid use disorder; alternatively, candidates from districts with a relatively low rate of opioid deaths use opioid messaging opportunities as a vehicle to purport party-defining issues that have only loose ties to the opioid crisis. Drawing on an extensive public health literature about addiction, I argue that, by conflating the opioid crisis with partisan issues like criminal justice or immigration, politicians perpetuate stereotypes about Americans struggling with opioid use disorder. Such stigmas have been shown to discourage treatment seeking behavior, especially among vulnerable populations (James and Jordan, 2018; Saloner et al., 2018).

From 1999 to 2019, nearly half a million Americans died from an overdose involving any opioid, including prescription and illicit opioids (Saloner et al., 2018). This past year, opioid overdoses claimed more lives than did car accidents and gun deaths combined. Although the genesis of America's opioid addiction can be clearly traced to drug manufacturers like Purdue Pharma, questions remain over the types of societal factors that continue to perpetuate opioid addiction. Despite fierce national, state, and local efforts to stem drug abuse,

¹¹ Josh Katz and Margot Sanger-Katz. "Its Huge, Its Historic, Its Unheard-of: Drug Overdose Deaths Spike." The New York Times. 14 July, 2021. https://www.nytimes.com/interactive/2021/07/14/upshot/drug-overdose-deaths.html

opioid deaths exponentially increased in 2020. When it comes to opioid addiction, knowledge is power. Testa et al. (2020) show that access to information about opioid addiction is critical to increasing individuals' willingness to pursue treatment. This follows Jerit et al.'s (2006) finding that information access elevates citizen knowledge about political issues. Elites play a pivotal role in disseminating information about policy debates (e.g., Grimmer 2013b). However, my analysis demonstrates that many politicians use their opioid messaging opportunities to talk about issues related to immigration and criminal justice, which are inconsequential to curbing America's opioid epidemic. When they engage in this kind of messaging behavior, politicians misrepresent the scope and severity of the opioid crisis. Moreover, when addiction is framed using a "law-and-order" lens, Americans are more likely to perceive it as an illegal activity rather than a treatable health condition (McGinty et al., 2016); such stigma-building messages disincentive treatment-seeking behavior. When politicians forgo discussions of policy debates about opioids to message on other issues, they rob citizens of the information they need to evaluate the world around them (Delli Carpini and Keeter, 1996). Normatively this means that, in districts where the epidemic currently has low local salience, citizens may lack the preventative knowledge about addiction they need to tackle opioid abuse if and when the crisis comes to their own community. Indeed, when politicians use symbolic rhetorical frames to talk about opioids, they are placing the party they belong to ahead of the people they want to represent.

References

- Aldrich, J. H. (2011). Why Parties? A Second Look. University of Chicago Press.
- Aldrich, J. H. and Rohde, D. W. (2011). The logic of conditional party government: Revisiting the electoral connection. In Dodd, L. C. and Oppenheimer, B. I., editors, *Congress Reconsidered*, pages 269–92. CQ Press.
- Ansolabehere, S. and Jones, P. E. (2010). Constituents' responses to congressional roll-call voting. *American Journal of Political Science*, 54(3):583–597.
- Balla, S. J., Lawrence, E. D., Maltzman, F., and Sigelman, L. (2002). Partisanship, blame avoidance, and the distribution of legislative pork. *American Journal of Political Science*, 46(3):515–525.
- Banda, K. K. and Carsey, T. M. (2015). Two-stage elections, strategic candidates, and campaign agendas. *Electoral Studies*, 40:221–230.
- Barber, M. and Pope, J. C. (2019). Does party trump ideology? disentangling party and ideology in america. *American Political Science Review*, 113(1):38–54.
- Bonica, A. (2014). Mapping the ideological marketplace. American Journal of Political Science, 58(2):367–386.
- Campbell, A., Converse, P. E., Miller, W. E., and Stokes, E. D. (1960). The American Voter.
- Canes-Wrone, B., Brady, D. W., and Cogan, J. F. (2002). Out of step, out of office: Electoral accountability and house members' voting. *Annual Review of Political Science*, 96:127–140.
- Canes-Wrone, B., Minozzi, W., and Reveley, J. B. (2011). Issue accountability and the mass public. *Legislative Studies Quarterly*, 36(1):5–35.
- Carmines, E. G. and Stimson, J. A. (1980). The two faces of issue voting. *American Political Science Review*, 74(1):78–91.
- Carson, J. L., Koger, G., Lebo, M. J., and Young, E. (2010). The electoral costs of party loyalty in congress. *American Journal of Political Science*, 54(3):598–616.
- Chang, J., Boyd-Graber, J., Gerrish, S., Wang, C., and Blei, D. M. (2009). Reading tea leaves: How humans interpret topic models. In *Proceedings of the 22nd International Conference on Neural Information Processing Systems*, pages 288–296.
- Cizmar, A. M. (2011). Easy issues in american politics. Master's thesis, University of Maryland.
- Cobb, M. D. and Kuklinski, J. H. (1997). Changing minds: Political arguments and political persuasion. *American Journal of Political Science*, 41(1):88–121.
- Converse, P. E. (1964). The nature of belief systems in mass publics. Critical Review, (1-74).
- Cox, G. W. and Mager, E. (1999). How much is majority status in the u.s. congress worth? *American Political Science Review*, 93(2):299–309.

- Crosson, J. M., Furnas, A. C., Lapira, T., and Burgat, C. (2020). Partisan competition and the decline in legislative capacity among congressional offices. *Legislative Studies Quarterly*, page Online First.
- Curiel, J. A. and Steelman, T. (2019). Redistricting out representation: Democratic harms in splitting zip codes. *Election Law Journal*, 17(2):328–53.
- Curry, J. M. (2015). Legislating in the Dark: Information and Power in the House of Representatives. University of Chicago Press.
- Darr, J. P., Hitt, M. P., and Dunaway, J. L. (2018). Newspaper closures polarize voting behavior. *Journal of Communication*, 68(6):1007–1028.
- Delli Carpini, M. X. and Keeter, S. (1996). What Americans Know Abouit Politics and Why It Matters. Yale University Press.
- Druckman, J. N., Hennessy, C. L., Kifer, M. J., and Parkin, M. (2010). Issue engagement on congressional candidate web sites, 2002–2006. *Social Science Computer Review*, 28(1):3–23.
- Druckman, J. N., Kifer, M. J., and Parkin, M. (2009). Campaign communications in u.s. congressional elections. *American Political Science Review*, 103(3):343–366.
- Eshima, S., Imai, K., and Sasaki, T. (2021). Keyword assisted topic models. Working Paper.
- Fan, J., Han, F., and Liu, H. (2014). Challenges of big data analysis. *National Science Review*, 1(2):293–314.
- Gailmard, S. and Jenkins, J. A. (2007). Negative agenda control in the senate and house: Fingerprints of majority party power. *The Journal of Politics*, 69(3):689–700.
- Gelman, J. (2020). Losing to Win: Why Congressional Majorities Play Politics Instead of Make Laws. University of Michigan Press.
- Gimpel, J. G., Lee, F. E., and Pearson-Merkowitz, S. (2008). The check is in the mail: Interdistrict funding flows in congressional elections. *American Journal of Political Science*, 52(2):373–394.
- Grimmer, J. (2013a). Appropriators not position takers: the distorting effects of electoral incentives on congressional representation. *American Journal of Political Science*, 57(3):624–642.
- Grimmer, J. (2013b). Representational Style in Congress: What Legislators Say and Why It Matters. Cambridge University PressC.
- Grimmer, J. and Stewart, B. M. (2013). Text as data: The promise and pitfalls of automatic content analysis methods for political texts. *Political Analysis*, 21(3):267–297.
- Groeling, T. (2010). When Politicans Attack: Party Cohesion in the Media. Cambridge University Press, New York, NY.
- Grogan, C. M., Bersamira, C. S., Singer, P. M., Smith, B. T., Pollack, H. A., Andrews, C. M., and Abraham, A. J. (2020). Are policy strategies for addressing the opioid epidemic

- partisan? a view from the states. Journal of Health Politics, Policy and Law, 45(2):277–309.
- Grose, C. R., Malhotra, N., and Houweling, R. P. V. (2015). Explaining explanations: How legislators explaintheir policy positions and how citizens react. *American Journal of Political Science*, 59(3):724–743.
- Grose, C. R. and Oppenheimer, B. I. (2007). The iraq war, partisanship, and candidate attributes: variation in partisan swingin the 2006 u.s. house elections. *Legislative Studies Quarterly*, 32(4):531–557.
- Grossmann, M. and Hopkins, D. A. (2016). Asymmetric Politics: Ideological Republicans and Group Interest Democrats. Oxford University Press.
- Hasecke, E. B. and Mycoff, J. D. (2007). Party loyalty and legislative success: Are loyal majority party members more successful in the u.s. house of representatives? *Political Research Quarterly*, 60(4):607–617.
- Heberlig, E. S. (2003). Congressional parties, fundraising, and committee ambition. 2003, 56(2):151–161.
- Highton, B. and Rocca, M. S. (2005). Beyond the roll-call arena: The determinants of position taking in congress. *Political Research Quarterly*, 58(2):303–316.
- Hopkins, D. J. (2018). The Increasingly United States: How and Why American Political Behavior Nationalized. University of Chicago Press.
- Jacobson, G. C. and Carson, J. L. (2016). *The Politics of Congressional Elections*. Longman, New York, 7th edition edition.
- Jacobson, G. C. and Kernell, S. (1983). Strategy and Choice in Congressional Elections. Yale University Press, New Haven, 2nd edition edition.
- James, K. and Jordan, A. (2018). The opioid crisis in black communities. *Journal of Law, Medicine and Ethics*, 46(2):404 421.
- Jerit, J., Barabas, J., and Bolsen, T. (2006). Citizens, knowledge, and the information environment. *American Journal of Political Science*, 50(2):266–282.
- Jones, P. E. (2011). Which buck stops here? accountability for policy positions and policy outcomes in congress. *Journal of Politics*, 73(3).
- Lawson, C., Meyers, C., McCord, A., Irlbeck, E., and Boren, A. (2021). Individual depictions, causes, and consequences: Effects of media frames on perceptions toward the rural opioid epidemic. *Journal of Applied Communications*, 105(2).
- Lawson, C. R. and Meyers, C. (2020). Country crisis: A content analysis of rural opioid epidemic news coverage. *Journal of Applied Communications*, 104(2).
- Lee, F. E. (2016). *Insecure Majorities: Congress and the Perpetual Campaign*. University of Chicago Press, Chicago, IL.

- Levendusky, M. (2009). The Partisan Sort: How Liberals Became Democrats and Conservatives Became Republicans. University of Chicago Press, Chicago, IL.
- Lewandowsky, S., K.H., U., and JohnCook, E. (2017). Beyond misinformation: Understanding and coping with the "post-truth" era. *Journal of Applied Research in Memory and Cognition*, 6(4):353–369.
- Litman, A. (2017). Don't Just March: Run for Something. Simon and Schuster.
- Mason, L. (2018). *Uncivil Agreement: How Politics Became Our Identity*. University of Chicago Press.
- Mayhew, D. R. (1974). Congress: The Electoral Connection. Yale University Press, New Haven.
- McGinty, E. E., Kennedy-Hendricks, A., Baller, J., Niederdeppe, J., Gollust, S., and Barry, C. L. (2016). Criminal activity or treatable health condition? news media framing of opioid analysic abuse in the united states, 1998–2012. *Psychiatric Services*, 67(4):405–411.
- Milita, K., Ryan, J. B., and Simas, E. N. (2014). Nothing to hide, nowhere to run, or nothing to lose: Candidate position-taking in congressional elections. *Political Behavior*, 36:427–449.
- Moffitt, S. L. (2020). Introduction: The politics of the opioid epidemic. *Journal of Health Politics, Policy and Law*, 45(2):171–175.
- Oleszek, M. J. and Oleszek, W. J. (2012). Legislative sausage-making. In *Party and Procedure* in the United States Congress, pages 253–280. Rowman and Littlefield.
- Petersen, E. (2020). Staff pay levels for selected positions in house member offices, 2001-2019. Technical report, Congressional Research Service.
- Pollock, P. H., Lilie, S. A., and Vittes, M. E. (1993). Hard issues, core values and vertical constraint: The case of nuclear power. *British Journal of Political Science*, 23:29–50.
- Pope, J. C. and Woon, J. (2009). Measuring changes in american party reputations, 1939—2004. *Political Research Quarterly*, 62(4):653–661.
- Porter, R., Treul, S. A., and McDonald, M. (2020). Changing the dialogue: Descriptive candidacies and position taking in campaigns for the u.s. house of representatives. Presented at the 2020 Annual Meeting of the American Political Science Association.
- Prener, C. (2020). Areal weighted interpolation. https://slu-opengis.github.io/areal/articles/areal-weighted-interpolation.html.
- Reynolds, M. E. (2017). Who fights the good (party) fight? individual incentives to engage in partisan messaging in the u.s. senate. Prepared for presentation at the NCAPSA American Politics Workshop.
- Roberts, M. E., Stewart, B. M., Tingley, D., Lucas, C., LederLuis, J., Gadarian, S. K., Albertson, B., and Rand, D. G. (2014). Structural topic models for open-ended survey responses. *American Journal of Political Science*, 58(4):1064–1082.

- Rohde, D. W. (1979). Risk-bearing and progressive ambition: The case of members of the united states house of representatives. *American Journal of Political Science*, 23(1):1–26.
- Russell, D., Spence, N. J., and Thames, K. M. (2019). 'it's so scary how common this is now:' frames in media coverage of the opioid epidemic by ohio newspapers and themes in facebook user reactions. *Information, Communication, and Scoeity*, 29:702–708.
- Russell, D., Thames, K. M., Spence, N. J., and Koeval, C. M. (2020). Where the fault lies: Representations of addiction in audience reactions to media coverage of the opioid epidemic. *Contemporary Drug Problems*, 47(2).
- Saloner, B., McGinty, E. E., Beletsky, L., Bluthenthal, R., Beyrer, C., Botticelli, M., and Sherman, S. G. (2018). A public health strategy for the opioid crisis. *Public Health Reports*, 133(1):24–34.
- Sellers, P. (2009). Cycles of Spin: Strategic Communication in the U.S. Congress. Cambridge University Press.
- Sides, J. (2007). The consequences of campaign agendas. American Politics Research, 35(4):465–488.
- Snyder, J. M. and Ting, M. M. (2002). An informational rationale for political parties. *American Journal of Political Science*, 46(1):90–110.
- Sulkin, T., Moriarty, C. M., and Hefner, V. (2007). Congressional candidates' issue agendas on- and off-line. *The International Journal of Press/Politics*, 12(2):63–79.
- Tang, J., Meng, Z., Nguyen, X., Mei, Q., and Zhang, M. (2014). Understanding the limiting factors of topic modeling via posterior contraction analysis. In *Proceedings of the 31 st International Conference on Machine Learning*.
- Testa, P. F., Moffitt, S. L., and Schenk, M. (2020). Public preferences for new information on opioids. *Journal of Health Politics, Policy and Law*, 45(2):311–339.
- Wallace, S. J. and Zepeda-Millán, C. (2020). Walls, Cages, and Family Separation: Race and Immigration Policy in the Trump Era. Cambridge University Press.
- Weiss, M. and Zoorob, M. (2021). Political frames of public health crises: Discussing the opioid epidemic in the us congress. *Social Science and Medicine*, 281:Online First.
- White, J. K. (2016). Donald trump and the scourge of populism. The Forum, 14(3).
- Xenos, M. A. and Foot, K. A. (2005). Politics as usual, or politics unusual? position taking and dialogue on campaign websites in the 2002 u.s. elections. *Journal of Communication*, 55(1):169–185.

Policy Facts or Partisan Friction?: Explaining Political Communication on America's Opioid Epidemic Appendix & Supplementary Information

Contents

Campaign Platform Prevalence	
Table A1: Main Indicators for Missingness in Policy Platform Adoption	1
Table A2: Main Indicators for Opioid Issue Adoption	2
Sample Position Taking Text on Comparison Issues	į
Keyword Assisted Topic Model (keyATM) Estimation	
Figure A1: Topic-Specific Keyword Proportions Across Campaign Platforms	5
Validation Text for Keyword Assisted Topic Model	6
Top Words Associated With Topics Defined by KeyATM vs. STM	12
Predicted Probabilities for Omitted KeyATM Topics	13
Top Words Associated With Topics Defined Multi-KeyATM	14

Table A1: Main Indicators for Missingness in Policy Platform Adoption

	DV: Presence of Policy Platform
Candidate Party: Republican	-0.492^{*}
	(0.078)
Past Political Experience: Held Office	0.137
	(0.128)
Past Political Experience: Congressional Incumbent	0.668*
	(0.142)
Primary Type: Open Primary	-0.158
	(0.0879)
Primary Type: Closed Primary	-0.164
	(0.131)
Open Race	0.387^{*}
	(0.098)
District Partisanship: Safe, Same-Party	0.127
	(0.102)
District Partisanship: Two-Party Competitive	0.551*
	(0.117)
Year: 2020	0.074
	(0.077)
Less Than 5% Vote-Share	-1.016*
	(0.108)
Unopposed Primary	-0.063
	(0.121)
Constant	1.229*
	(0.105)
Observations	3,959
Note:	**p<0.05

Table A2: Main Indicators for Opioid Issue Adoption on Congressional Campaign Website, 2018-2020

	DV: Presence of Opioid Position
Rate of Opioid Overdose by CD	0.043*
	(0.006)
Candidate Party: Republican	-0.238^*
	(0.083)
District Partisanship: Safe, Same-Party	-0.009
	(0.112)
District Partisanship: Two-Party Competitive	-0.098
	(0.111)
Open Race	0.170
	(0.132)
Past Political Experience: Held Office	-0.354^{*}
	(0.136)
Past Political Experience: Congressional Incumbent	0.283*
	(0.113)
Primary Type: Open Primary	-0.119
	(0.101)
Primary Type: Closed Primary	0.106
	(0.133)
% of Constituency, No High-school Diploma	5.478
	(5.036)
% of Constituency, White	0.014*
	(0.003)
% of Constituency, 100k+ Household Income	-0.016*
	(0.004)
Year: 2020	-0.210^{*}
	(0.090)
Constant	-1.764^{*}
	(0.641)
Observations	2,925
Log Likelihood	-1,760.226
Akaike Inf. Crit.	3,548.452

Note: *p<0.05

Example Position Taking Text for Comparison Issues

Below are example policy platform positions on easy and hard comparison issues taken from congressional campaign websites across 2018 and 2020. These nationally salient example issues references those introduced in Table 1 on page 16 of the main paper text.

Programmatic Issues

Improvements to American Infrastructure

Our region of upstate New York presents countless opportunities for investment in infrastructure. Im committed to helping our communities obtain federal funding to finance local construction projects that will create both short-term and long-term jobs, and improve the lives of those who live here. The President has talked tough about pushing for a bipartisan infrastructure bill, but has indicated that he intends to offer tax breaks for privatized projects rather than funding public works. I oppose such a giveaway to corporations, which favors corporate profits over community needs, and incentivizes companies to build as little as possible rather than undertaking the robust development that we need here in our region. We need to bid those contracts out in a fair process that lets small businesses actually compete and results in lasting improvements to our shared facilities and services...

—Incumbent Antonio Delgado D-NY, 2020 Campaign Platform

Whether Republican or Democratic, most politicians find safety and comfort in the familiar promise that they support investments in infrastructure to support job creation in their districts. I too stand among that number; guilty as charged. The difference, however, is found when you look into the specificsthe detailsthat follow the well-worn promise. All too often we see that the promise of infrastructure improvements is just an election year pledge that stands alone, absent any real connection to remedying current problems or addressing strategic concerns...The U.S. is in need of a long-range strategic plan for infrastructure development that can address current problems and anticipate the needs of the next generation in commerce and transit. Estimates of the current U.S. population hover at about 320 million and that number is expected to reach 400 million within the next thirty-five years...

—Candidate Junius Rodriquez D-IL, 2018 Campaign Platform

Military Presence in Middle East

As a former combat soldier based in Afghanistan, I have seen the enemy face to face. I also know the war we are in is not only a war of military force; it is a war of ideology. ISIS seeks to destroy western civilization and our very way of life. President Obamas half-hearted, inconsistent policy failed, which is why we are working to quickly rebuild our military and put our troops on the front line in the best possible position to succeed. As a Member of the Foreign Affairs Committee, I know we must also work to combat aggression from Iran, North Korea, Russia, and other adversaries who work to undermine global security. I strongly opposed the Iran Nuclear Deal and commend President Trump for withdrawing from it. Thats why Ive voted to institute new sanctions on Iran, as well as North Korea and Russia...

—Incumbent Brian Mast R-FL, 2020 Campaign Platform

I support ending the war in Afghanistan and bringing our troops home as soon as safely possible the goals of expelling al-Qaeda and overthrowing the Taliban were accomplished years ago. It took about a thousand Special Forces troops to overthrow the Taliban in 2001. Why do we need a hundred times that number now to keep them out? Instead of spending billions on the other side of the world, we can spend that money here to rebuild America. We simply can no longer afford these wars. The American people are tired of wars that do not make us safer.

—Incumbent Alan Grayson D-FL, 2018 Campaign Platform

Infectious Diseases (COVID-19, Ebola, Zika)

We need to respond to COVID-19 with permanent systems and structures so that we never find ourselves in this fragile position again. Our broken healthcare system made this novel coronavirus exceptionally crippling. Now, because our health insurance is tied to our job, over 30 million Americans are facing not only unemployment but losing their health insurance too. As we begin to reopen, we have to ask ourselves what our new normal should look like. If you lose your job, you shouldnt lose your healthcare too. And if you get sick, you shouldnt be put under a mountain of debt. Medicare for All guarantees healthcare to everyone, curbs costs, and improves long-term health...

—Incumbent Alexandria Ocasio-Cortez D-NY, 2020 Campaign Platform

The Trump Administration tried to gut the funding, and thankfully Congressman Delaney was able to save it. But we need to be vigilant to make sure that the funding does not find its way back to the chopping block. Global pandemics like Zika and Ebola are also serious threats to our national security. I support doubling the budget of NIH to do more research into combating the spread of deadly diseases. I support net neutrality. Internet providers and telecom-companies should not control the speed that consumers can access the Internet. Net neutrality makes good business sense. It gives startups, consumers, and broadband giants an equal playing field. We should treat Internet access like any other utility, so that businesses and consumers have access to the same speeds at a low cost.

—Incumbent David Trone D-MD, 2018 Campaign Platform

Symbolic Issues

Women's Reproductive Choices

When our Founding Fathers wrote the Constitution, they enshrined some of our God-given rights into law. Too often, those rights are under attack. Chuck will always fight to preserve our conservative values to ensure that the America we know and love remains for generations to come. All human life has value and is sacred, and Chuck believes that life begins at conception. He strongly opposes using taxpayer money to fund abortions, and Planned Parenthood. He is deeply troubled by the radical Lefts promotion of abortion, and even infanticide. Chuck will always stand up for our most vulnerable.

—Incumbent Chuck Fleischmann R-TN, 2020 Campaign Platform

Oregonians can always count on me to stand up for reproductive rights and work to increase access to family planning and health care services for all women, particularly low-income women and those

with geographic barriers. Sadly, under the new administration, Congressional Republicans who are determined to roll back womens reproductive rights, defund Planned Parenthood, and block access to health care. They refuse to acknowledge that access to contraceptives and reproductive health care are proven to reduce health costs for individuals and the health care system as a whole, as well as reduce the number of unplanned pregnancies and abortions.

—Incumbent Suzanne Bonamici D-OR, 2020 Campaign Platform

Detention & Deportation of Immigrants

I strongly support President Trumps border wall and voted to provide over \$1.6 billion to begin its construction. I swore an oath to protect and defend the American people and an unsecure border undermines that promise and their safety. Thats why I have led the effort in Congress to ensure refugees from terrorist hotbeds are fully vetted, deport criminal aliens, and cut off taxpayer funding for sanctuary cities that threaten our nations immigration laws.

—Incumbent Brian Babin R-TX, 2018 Campaign Platform

Undocumented immigrants live under the constant threat of deportation, especially with the increase in ICE operations since Trumps inauguration. These immigrants work hard in their communities to provide for themselves and their families, and are excluded from access to public services. Mary Gay will work to provide a path to citizenship for all 11 million undocumented immigrants. For decades, genocide, war, famine, and other human rights crises have forced millions to flee their home countries. Families have been separated, generations devastated; entire regions crippled financially, structurally and emotionally. For generations, resourceful and hopeful refugees have looked to America as a beacon of freedom and land of opportunity, and they have enriched our country with their resilience, their work ethic, and their talents. We must ensure that refugees fleeing violence and persecution have the opportunity to seek asylum in America.

—Incumber Mary Gay Scanlon D-PA, 2018 Campaign Platform

Law Enforcement & Policing

Hiral believes it is our duty as a nation to address the systemic racism and generations of inequities and discrimination that have held back our Black and Brown communities. This includes not only reforming our criminal justice system to end racial profiling, discriminatory policing, and police brutality, but broader initiatives that work toward a level playing field that ensures equal economic and educational opportunity, access to quality and affordable housing, eliminating health disparities, and so many other critical issues. —Candidate Hiral Tipirneni D-AZ, 2020 Campaign Platform

As Chairman of the Counterterrorism and Intelligence Subcommittee Pete King works closely with the NYPD and the Nassau and Suffolk County Police Departments. Congressman King has obtained millions of dollars in Homeland Security funds for these departments.

—Incumbent Peter King R-NY, 2018 Campaign Platform

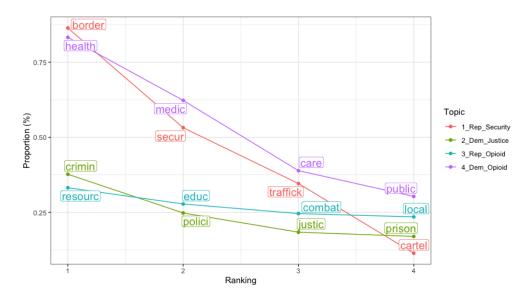


Figure A1: Topic-Specific Keyword Proportions Across Campaign Platforms, 2018-2020

Proportion displayed here are defined as a number of times a keyword occurs in the corpus divided by the total length of documents. Per Eshima et al. (2021), keywords should appear reasonable times (typically more than 0.1% of the corpus) in the documents to serve as informative in model estimation.

Validation Text for Keyword Assisted Topic Model

Below are randomly sampled policy platform positions on the topics generated for the keyword assisted topic model outlined in pages 20-21 of the main body text. Each of these validation opioid texts were identified by my keyword assisted topic model as having content that principally belonged to one topic (i.e. topical proportion for the topic of interest was 0.50 or greater).

Keyword Topic: Republican-Security

The Tucson, AZ border sector is one of the busiest for illicit activity. Arizona families deserve to be safe in their communities. Illegal Immigration, Human trafficking, sex trafficking, coyotes. Flow of illegal drugs across our borders, including heroin cocaine, marijuana, and counterfeit opioids. In 2016, 64,000 Americans died by opioid overdose, a dramatic increase from 2003 "The solution is to control the border by establishing a layered defense, as well as working with our neighbors to the south as equal partners against crime and violence." John Kelly, White House Chief of Staff & Former DHS Secretary General. We need to build the wall.

—Brandon Martin (R-AZ), 2018 Campaign Platform

We need to secure our borders and build the wall on our southern border to stop the influx of illegal aliens, drugs, and criminal enterprises. The Mexican cartels are bringing tons of heroin and cocaine through our porous borders. They deliver it all throughout the United States. Violent gangs have infiltrated every state of the union, and more of them come through each year. It is time to take this issue seriously and stop using it as a political football each election season.

-Keith Swank (D-WA), 2020 Campaign Platform

We need to strengthen borders to keep illegals, drugs and terrorists out. America will be safe with a strong military, and strong state and local law enforcement. We must stand by our police and fire and first responders, who are on the frontlines. Attacks on these safekeepers of society must be dealt with swiftly and severely. The illegal drug and opioid crisis must be handled thru a combined approach of cutting off the sellers, and finding compassionate, but strong, treatment for the users to free them of addictions.

-Krishna Bansal (R-IL), 2020 Campaign Platform

During the year of 2005 there were 4 to 10 MILLION illegal aliens that crossed our southern border also, as many as 19,500 illegal aliens from terrorist countries. Millions of pounds of drugs, cocaine, meth, heroin and marijuana, crossed into the U.S. From the Southern border.

—Mark Reed (R-CA), 2018 Campaign Platform

The greatest responsible of our national government is to defend its citizens. The threat of terrorism and another horrific terrorist attacks looms large. In Congress I will do whatever I can to help ensure our military, border security and law enforcement have the resources and support to keep our citizens safe. This starts by supporting so many of the men and women in our district who are working as defense contracts in important industries. National Security includes stopping illegal immigration and dangerous drug dealers at our border. It is absolutely pathetic that a nation with such wealth, sophistication and technology cannot secure our border. I first learned of the horror of illegal drugs from my older brother who was a drug abuse counselor. Today, almost every single one of us knows a person or family who is suffering from the opioid crisis. I strongly support efforts of law enforcement and counselors to address this crisis. I also believe we need to demand that the government of Mexico do more to destroy opium crops at their source and will make this a priority in Congress.

—George Phillips (R-NY), 2020 Campaign Platform

Keyword Topic: Republican-Opioid

If elected, I will push for national comprehensive legislation that addresses the opioid crisis by curbing the supply of opioids and provide substantially greater support for treatment. I will be a vocal champion in Congress to bring drug companies to account if they engage in predatory and misleading practices that contribute to this national epidemic. Its no secret we have a national emergency going on with opioid addiction, which today is the leading cause of death for Americans under 50. In Michigan, opioid overdoses now claim more lives than car accidents, including hundreds of deaths each year in communities here in our district. It is the responsibility of our elected officials to address the opioid epidemic head on and take real action. In addition to pushing for real federal action, if elected I would use my position as a member of Congress to bring the stakeholders of our communities together from high schools, firefighters, police and first responders, community coalitions, treatment programs, nonprofits and hospitals to draft a community action plan that tackles this issue at home. I have already begun meeting with community members to learn all that I can about how we are fighting this epidemic here in our district. Pharmaceutical companies have a vested interest in keeping profits sky high, and we cannot be complacent this is a fight we must address head on.

—Elissa Slotkin (D-MI), 2020 Campaign Platform

As a leader in supporting our local police officers and protecting the citizens of Northwest Indiana, Pete promotes initiatives to ensure that law enforcement officials have the tools they need to keep themselves safe and our communities secure. After learning that police officers did not have funding to purchase bulletproof vests, and that they were combating criminals who were wearing bulletproof vests, Pete took decisive action to create the federal Bulletproof Vest Partnership Grant Program. This program helps local law enforcement departments purchase life saving protective vests for their officers. Further, Pete is a strong advocate of the High Intensity Drug Trafficking Area that provides federal resources to support Lake and Porter County police departments to combat regional threats to our communities.

—Pete Visclosky (D-IN), 2018 Campaign Platform

The opioid epidemic has been affecting every person and household across the country. According to the CDC, roughly 115 people die each day from an opioid overdose in the United States. From an economic standpoint, prescription opioid and illicit drug abuse costs the U.S. more than \$272 billion per year. The House has passed more than 70 bills that fight the opioid crisis. These are bills that support treatment and recovery, educate on prevention, protect our communities by supplying law enforcement with the resources they need, and fight against fentanyl. This is the largest federal response to a U.S. drug crisis in the history of our country. I have supported many pieces of legislation and sponsored bills like the STOP OD Act, which would extend grants to expand opioid addiction prevention education programs and training for law enforcement and first responders to treat an overdose directly in our communities. This epidemic is sweeping through our nation like a natural disaster and it is time we start treating it like one. I have, on many occasions, called on the administration and Congress to send emergency relief funding directly to our communities like we do when there is a natural disaster in this country. Lives are being lost every day, families are being broken apart, and we need to do something about it now.

—David Joyce (R-OH), 2020 Campaign Platform

Prevention and treatment programs and additional behavioral health professionals are in desperate need across Alaska. We must comprehensively address the opioid crisis and strengthen access to treatment and recovery services. We must change from the current system that compensates providers based on the volume of services they perform and move to one that compensates based on healthcare outcomes. I support federal policies that make it easier for people to get primary and preventative care to stay healthy. Everywhere I go in Alaska, I hear from people that they feel unsafe in their homes, in their businesses and their communities. Anchorage is battling violent crime and property crime like never before. Rural Alaska is struggling to keep our communities safe without adequate law enforcement officers. The opioid epidemic is a public health crisis thats driving up crime. Globally, we lack a foreign policy that makes Americans feel secure and well protected. Finally, our financial well being is threatened by proposed cuts to Social Security and Medicare. Alaska needs more from our leaders to strengthen our safety and security. The ravaging effects of opioid addiction are tearing through our families and communities. Alaska has the countrys highest percentage of teen drug users and the second highest percentage of adult users. In Congress, I will fight to put an end to this epidemic and get support for Alaskans whose lives have been devastated, including: * Better funding for treatment and recovery programs * Strengthening re entry support for people who have completed treatment, are returning to their communities, and need help to stay employed, sober and stable * Expanding access to mental health services to

help people before they turn to self medication as a way to deal with their suffering * Supporting solutions like Project Hope and recommendations of the Alaska Opioid Task Force to provide these folks with the attention and support they need to help everyone who needs it * Improving research and treatment of intergenerational trauma, which too often leads to drug abuse, violence, and suicide unless the cycle is broken

—Alyse Galvin (R-AK), 2018 Campaign Platform

Fred understands how out of control opioid abuse has gotten in our community and across the country. As part of Freds landmark 21st Century Cures Act, the federal government has allocated \$1B in funding to states to prevent and fight opioid addiction. In the first round of funding, Michigan received \$16 million in grants. These resources will make a big difference. Fred continues to work directly with Southwest Michigan law enforcement, medical and education communities, and families to address the tragic epidemic of prescription drug and heroin abuse. Fred has also worked on bipartisan legislation to promote cooperation among the private sector and government agencies to encourage prevention and treatment to help patients. Drug abuse doesnt discriminate, and Fred knows we need to work together to solve this crisis sweeping through our communities. As a result of Freds bipartisan leadership, individuals facing addiction and their concerned families have more hope they can overcome the life threatening challenge of drug addiction.

—Fred Upton (R-MI), 2018 Campaign Platform

Keyword Topic: Democratic-Justice

Our prisons and jails are full of nonviolent drug offenders and people who are incarcerated because they cant afford a fine or bond. This overburdens our criminal justice system and disproportionately impacts communities of color. We must reform sentencing, ensure those who are incarcerated are rehabilitated and prepared to reenter society, reduce recidivism and end the 50 year failed war on drugs, which has treated a medical problem with a criminal justice solution.

—Sri Preston Kulkarni (D-TX), 2020 Campaign Platform

The impact of the opioid epidemic on our communities has been devastating. Opioid dependency does not discriminate, and I have heard countless stories of painful addiction and heartbreaking loss from people of all backgrounds, income levels, race, and age. One in four New Yorkers knows someone who has died after overdosing on opioids and more than half have been directly touched by opioid abuse. With rates of overdose in our region continuing to rise and more and more lives being stolen each day, there is no denying that this is an urgent crisis and one that requires us to forge solutions by working together. The first change must come from us allwe must remove the stigma of judgment and punishment that burdens so many struggling with opiates and instead shift towards a compassionate focus on treatment and reform. Im committed to fighting for policies that promote treatment over incarceration, appropriate federal dollars for programs oriented towards delivering addicts to detox centers, and ensure Medicaid funding for drug treatment facilities. We must also hold drug manufacturers accountable for knowingly marketing these highly addictive substances which directly contributed to their overprescribing and abuse.

—Antonio Delgado (D-NY), 2020 Campaign Platform

Our country wastes huge amounts of money on imprisoning a huge human resource, especially when

we are crying for workers. This is closely tied to much needed drug policy reform. We need to work with addicts to prevent them from reentering the prison system by expanding drug courts and proving needed resources. We need to take on the Opioid Crisis head on and help the people who are addicted rather than throwing them in jail and hoping for the best.

—Chuck Eddy (R-KY), 2020 Campaign Platform

Hold doctors liable for over prescription of Opioid drugs. * Allow for varying levels of coverage from emergency care to premium plans. * Eliminate mandates, such as prenatal coverage for senior citizens. * Triple the budget for fraud prevention and prosecution of fake doctors or unauthorized health clinics. We also need to come to the realization that medical marijuana must be taken off the list of Schedule 1 drugs to allow for testing and use by our military veterans with Post Traumatic Stress Disorder (PTSD). The cost benefit would surely bolster our failing health care system until reforms are enacted. If we can get past the infighting, I am sure we can get past the problems to fix this broken system that is failing all citizens.

—Steve Vargas (R-CA), 2018 Campaign Platform

Drugs like opioids represent a public health crisis, not a criminal crisis, and should be handled through our medical system instead of our prison system. When sick and poor families are riddled with problems like addiction; when those struggling with debilitating pain put themselves at risk of overdosing; when the distribution of drugs represents one of the few economies in struggling areas, we should see drugs as symptoms of deeper, societal issues, instead of a moral failing of individual people. Since the War on Drugs has started, weve seen a 500% increase in imprisonment rates, and now, almost half a century later we must ask ourselves: has drug use stopped? Have drugs disappeared from our communities? Are our communities healthier when so many of our youth are put into the system? My answer is no. If something weve tried for decades has yet to work, its time to find better solutions that reflect the growing cost of criminalizing sickness through our prisons.

—Audri Williams (D-AL), 2018 Campaign Platform

Keyword Topic: Democratic-Opioids

Ohio is second in the nation for Opioid related overdose deaths. Based on the most updated numbers, over 70,000 families suffer from opioid related loss each year. Life expectancy in the US went down in 2018 for the first time since World War 1 because it was negatively affected by drug overdoses. Alainas father was a physician. Before his death in 1999, he was absolutely outraged when doctors began to prescribe Oxycodone. He said that due to an opioids addictive nature, the drug should only be prescribed to people with terminal illnesses, period. Alaina believes pharmaceutical companies knew this fact and yet continued to flood the markets with these dangerous drugs. Today, they all need to be held accountable. Alaina would support legislation prohibiting the distribution of opioids to patients unless it is being prescribed to medicate pain during a terminal illness. Opioid addiction is a national crisis. Addiction is a disease and should be treated as such. We need to treat the problem holistically, including early prevention in at risk communities, intervention and harm reduction for those addicted, and long term care for those recovering from addiction. We need to expand mental health services for those affected in order to mitigate the effects of addiction for current/former addicts and their loved ones.

—Alaina Shearer (D-OH), 2020 Campaign Platform

Investing in comprehensive mental health care. Like many communities across the country, the 14th has been impacted by the opioid epidemic. This problem will not be solved by law enforcement solutions alone addressing the underlying behavioral health components of addiction is critical. To tackle this crisis, we need everyone to come to the table to implement a fully funded, comprehensive solution that will address prevention, treatment, and recovery. We must curb future addictions, but we also cannot forget those who are currently struggling without access to much needed treatment. We need to pass legislation that will reduce cost barriers to treatment, and that will ensure Medicaid and health insurance cover both detox and rehab. Inaction on this issue is not an option.

— Lauren Underwood (D-IL), 2018 Campaign Platform

The opioid epidemic has stolen more than one person from us per day in Maine and scarcely a community in our state doesnt have a personal story about how this crisis has affected them. We need to take serious action to support long term public health infrastructure and help people get back on their feet. Theres no one solution to this epidemic, but the answers are there if we have the political will. Increasing access to treatment is critical to reaching people with substance use disorder, many of whom dont have the means to afford private programs. Thats why Chellie has fought for and won increased funding for addiction treatment in Maine.

— Chellie Pingree (D-ME), 2020 Campaign Platform

A Solution for Mental Health and the Opioid Epidemic Opioid overdose deaths in Missouri continue to rise. This is largely due to limited options for treatment and extravagant initial costs for care of this and other mental health programs. This plan would remove those costs and expand program availability for all who desperately need it.

— Dennis Oglesby (D-MO), 2020 Campaign Platform

Substance abuse has been an American crisis for decades, and while opioid abuse may be new to the media, it is all too common for millions of Americans, including countless Ohioan families. In fact, the State of Ohio has the unfortunate distinction of having the most opioid related overdoses than any other state in the nation. Joyce is dedicated to helping individuals struggling with substance abuse disorders by breaking down barriers and increasing access to proven treatment options.

—Joyce Beatty (D-OH), 2020 Campaign Platform

Table A3: Top Words Associated With Topics Defined by KeyATM vs. STM $\,$

	Top W	Vords: Keyword Ass	sisted Topic Model	l	
Democratic Topics		Republican Topics		Model Generated	
Racial Justice (Easy Message)	Opioid Issue (Hard Message)	Border Security (Easy Message)	Opioid Issue (Hard Message)	Topic #1	Topic #2
drug system crimin war justic prison reform crime polici incarcer	addict treatment health support prevent program access medic care patient	border secur immigr illeg wall southern drug law traffick america	opioid resourc enforc educ combat local state communiti support fund	marijuana legal cannabi tax decrimin recreat schedul possess prohibit revenu	drug need problem crisi epidem famili respons american live help
	•	op Words: Structura	al Topic Model		
drug marijuana crimin war justic prison cannabi crime state	addict treatment health support mental profession access need program	border secur immigr illeg wall countri drug law traffick	opioid $help$ $introduc$ $cosponsor$ $hous$ $legisl$ $bill$ act $sign$	opioid crisi prescript overdos medic pain death compani pharmaceut	drug need problem work polic address abus nutrit intens
feder	lack	american	congression	naloxon	dealer

Figure A2: Topical Content for Republican Policy Platform Text on Opioid Issues

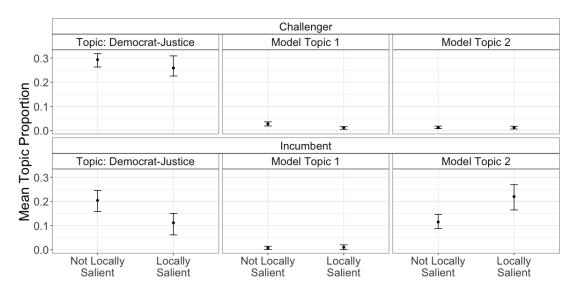
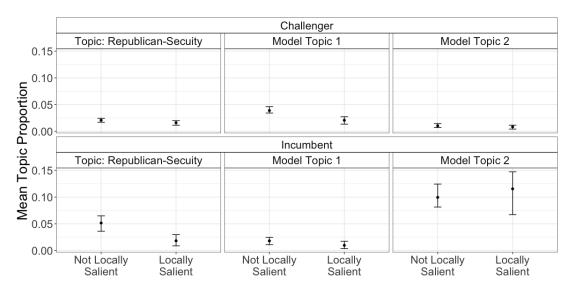


Figure A3: Topical Content for Democratic Policy Platform Text on Opioid Issues



Predicted probabilities for mean topic proportions in candidate platform text were generated using simulated data. Candidate past political experience and local opioid issue salience are varied; all other covariates are held at their mean value. The keyATM model was estimated over both Democratic and Republican policy platform text. Covariates for congressional district opioid salience and candidate type were both interacted with candidate partisanship.

Table A4: Top Words Associated With Topics Defined Multi-KeyATM: Full List

Press Releases						
Democratic Party Topics		Republican I	Republican Party Topics		enerated	
Opioid-Adjacent	Opioid-Specific	Opioid-Adjacent	Opioid-Specific			
(Criminal Justice)	(Treatment)	(Border Security)	(Resources)	Topic #1	Topic #2	
law	opioid	border	opioid	communiti	drug	
polici	health	secur	bill	district	fentanyl	
enforc	support	illeg	act	issu	death	
justic	fund	presid	legisl	congressman	combat	
marijuana	program	traffick	bipartisan	state	crisi	
Floor Speeches						
Democratic 1	Democratic Party Topics Republican Party Topics		Party Topics	Model Generated		
Opioid-Adjacent	Opioid-Specific	Opioid-Adjacent	Opioid-Specific	Topic #1	Topic #2	
(Criminal Justice)	(Treatment)	(Border Security)	(Resources)			
synthet	treatment	border	drug	crisi	right	
substanc	\mathbf{medic}	secur	bill	nation	number	
schedul	program	presid	committe	year	state	
law	provid	come	chairman	million	$_{ m time}$	
justic	communiti	immigr	legisl	death	even	
Proposed Bill Summaries						
Democratic Party Topics Republican Party Topics		Model Generated				
Opioid-Adjacent	Opioid-Specific	Opioid-Adjacent	Opioid-Specific	Topic #1	Topic #2	
(Criminal Justice)	(Treatment)	(Border Security)	(Resources)		- ··	
reduc	medicar	border	prescrib	control	manufactur	
establish	program	law	drug	substanc	drug	
includ	treatment	traffick	opioid	administr	use	
cannabi	health	secur	requir	amend	relat	
schedul	state	hous	bill	purpos	implement	