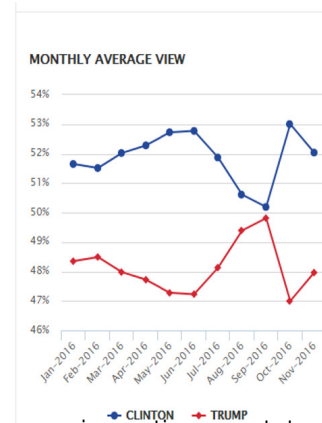
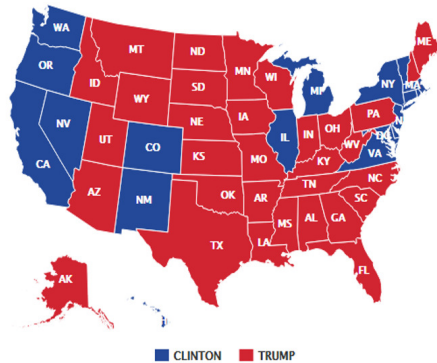


Showcase 1: Presidential election 2016



Standard polling has underestimated correlated errors in contiguous states, and polling aggregators have summed over top-lines of polls divergent on sample, methodology, quality. We predicted 48 out of 51 states correctly. Public polling missed three critical states: Michigan, Pennsylvania, and Wisconsin. We had Pennsylvania and Wisconsin going Republican and Michigan being tight. Overestimated Democratic support in the Rust Belt cost Democrats the only thing that mattered, the winner of the Electoral College. In contrast to most other polling, we were dead on with our prediction.



State-by-state results (left panel); Correlation of PredictWise Errors and HuffPost Pollster Errors (right panel)

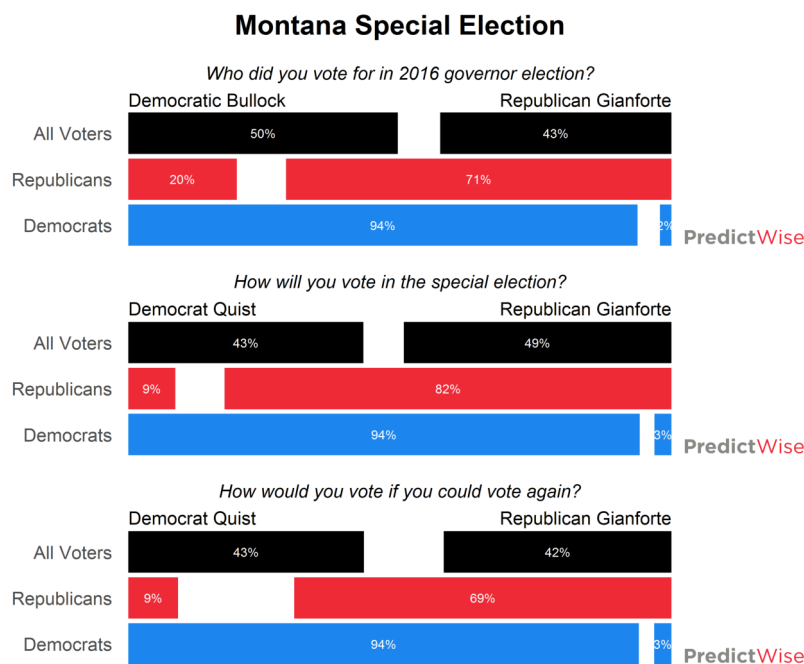
If we look at state-by-state results, our predictions had a Root Mean Squared Error of 4.24 ppt., essentially en par with HuffPost Pollster, but much cheaper, relying on a single polling technique etc. What's more, our state-by-state results add additional signal to the polling aggregation: PredictWise errors were essentially uncorrelated with HuffPost pollster errors.

Note: Polling Data collected on from 01/2017 through election day; N=40,000

Showcase 2: Montana: Special CD Election 05/25/2017

Standard polling in Montana, given the low interest in this Congressional Election, was constrained to two polling firms. Due to run-time of traditional polls, the impact of a late-in-the-game incident, when Gianforte assaulted a reporter on Wednesday night one day before the election, was highly unclear going into Election Day. We ran three polls of Montana: May 12, 19, and on election day, May 25 (12 PM MT to 7 PM MT). We had Republican Gianforte leading by +12. We were not planning on running an additional poll until the Gianforte incident. We ran a poll from 12 PM MT to 7 PM MT on Election Day and posted the results at 7:45 PM MT (15 minutes before the polls closed). The key findings:

1. High level of accuracy. We had Gianforte up by +5.7; he won by +6.

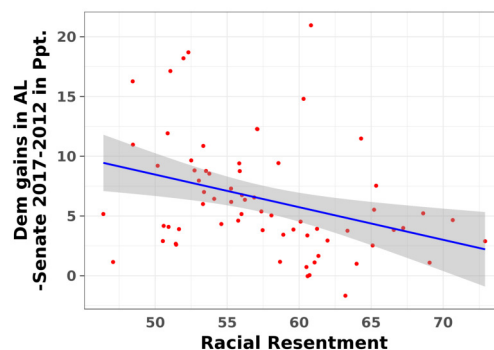
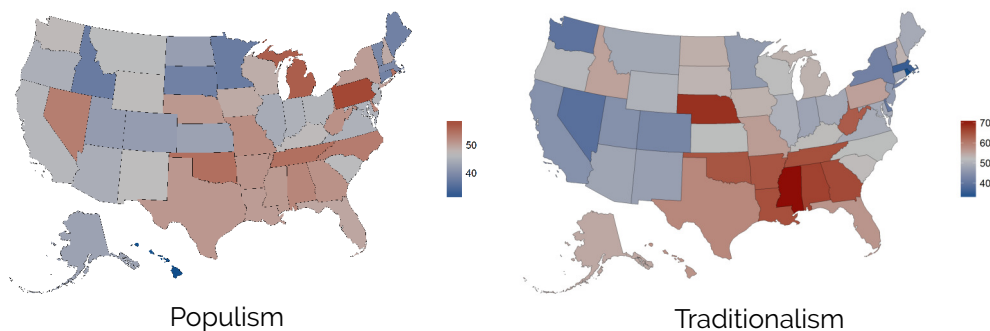


2. Effect of Assault: 67 percent or so of voters had already voted by mail, but Gianforte still fell from +12 to +5.5. Omitting non voters, we polled: Gianforte 48% and Quist 43%. The ground truth was Gianforte 50%, Quist 44%. So, we are very confident that the assault had a big impact, but it was somewhat dulled because Gianforte voters did not switch in high numbers to Democrat Quist, they moved to the Libertarian or did not vote. If there was a new vote today, with no early voting, we believe the election would be a perfect toss-up Quist leading by +1).

Note: Polling Data collected on May 25, 2017; MT respondents only

Showcase 3: Psychometrics

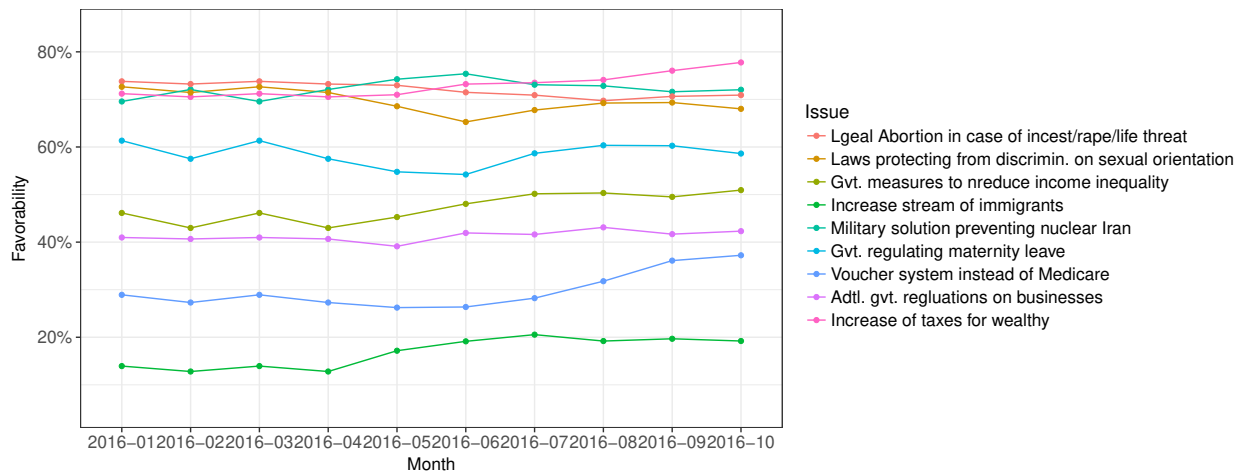
Traditional polls are preoccupied with the Horse Race and political polling in general has oftentimes provided a plethora of non-actionable data when top-lines of questions crafted with the sponsor's view in mind confirm rather than challenge predispositions. Instead, we poll with the goal of dissecting the American voters, here on psychometrics such as populism and traditionalism. Based on this polling, *PredictWise* has just completed scoring of more than 250,000,000 Americans on 19 different value-frames, economic positions and psychometrics, to be released with our partner *TargetSmart* in 03/2018. We see an uptick of both, populism and traditionalism in the rust belt, indicative of the same populist wave that has made Trump strong in these states. Interestingly, especially populism does not vary widely by party identification, highlighting the cross-over potential of Democratic voters to Republican populist candidates. Variations in racial resentment predicted county-level swings in the Democratic direction in the AL Special Senate Election, Dec. 12, 2017: The less pervasive racial resentment in a county, the more pronounced the pro-Democratic swing compared to previous elections.



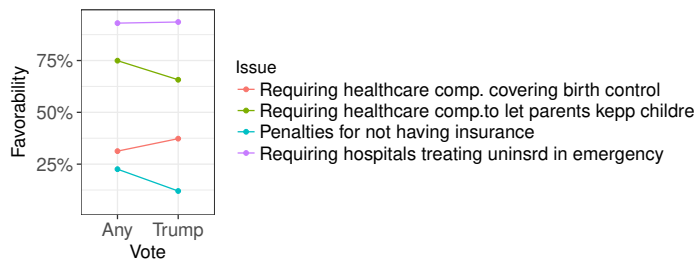
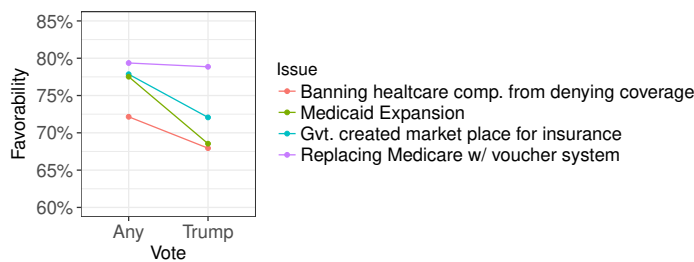
Data are based on national-level polls from that month (N=1,200, 05/15/2017 for populism, N=1,200, 05/31/2017 for traditionalism, and N=3,600, 10/25/2017, 11/20/2017, 01/20/2018 for racial resentment). Index is based on an index constructed from the responses to a 10-questions-battery for each psychometric, ranging from 0 to 100.

Showcase 4: Issue Top Lines vs. Components

Traditional polls rarely ask policy preferences, and if they do focus on top-lines ("Do you support the Affordable Care Act"). Instead, our polling focuses on identifying components of issues for which Democratic ideas are popular, and how sentiment on these compare against top-lines. For example, Trump voters support all key elements Obamacare (except mandate); while top-line polling on the ACA shows less favorability.



Components of healthcare (The Affordable Care Act)

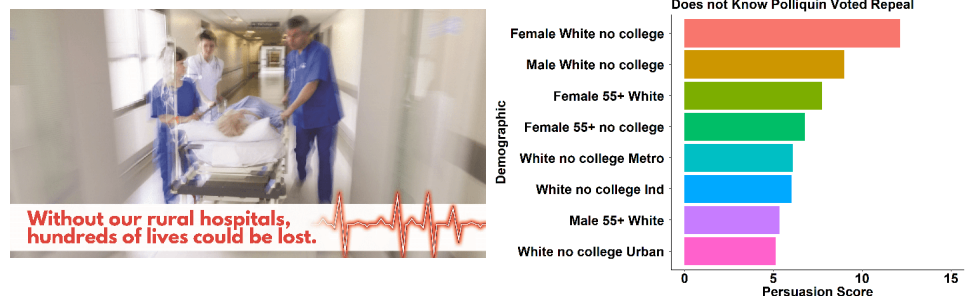


Note: Polling Data for healthcare collected on 10/10/2016; issue-related polling continuous, all N=1,200

Showcase 5: Targeted Ad Buys via *PredictWise* Decision Support

Traditional consulting firms test narrow message variations and validate choices based on click through rates, without tracking attitudinal effects, or validating whether effects decay. Instead, *PredictWise* isolates demographic groups based on pairing certain messages with the most valuable Demographic, based on the *PredictWise* persuasion score. The persuasion score combines our estimate of how much of a certain demographic can be persuaded (i.e. the percentage of a demographic indicating to vote for a Republican Congressman but leaning Democratic on certain issues), while also taking into account the overall size of that demographic to maximize impact.

We have spearheaded this approach in work around the ME-II Congressional Election 2018. We identified messages around educating voters concerned with rural hospitals about Congressman's Polliquin's vote to repeal the ACA as an efficient persuasion message based on initial polling. We then created the content in conjunction with an ad buying firm, and targeted the ad heavily to white females without a college degree, identified as the most efficient target for persuasion based on our persuasion score (below). Most ad buys were done on Facebook, and we are currently conducting further polling to track attitudinal effects over time.



Ad Content Disseminated in ME-II (left), Identification of Most Valuable Target Based on Persuasion Score (right)