The opioid crisis in the U.S. is a serious public health emergency affecting millions of Americans and their families.

Deaths from opioid-related overdoses rose 28 percent in just a year’s time, from 2015 to 2016, according to a 2018 Centers for Disease Control and Prevention (CDC) study, with the death toll numbering more than 42,000 people. 115 people die every day overdosing on opioids. In addition to the devastating loss of human life, the economic impact is substantial, estimated at $1 trillion dollars and growing.

The Public Good Projects (PGP), an evidence-based nonprofit public health monitoring and communication organization, partnered with the National Academies of Sciences to learn how best to reach emerging adults, ages 18 to 25, the period where many people begin to use opioids. The goal was to understand the public discourse about the crisis, including the differences between rural and urban populations, which messages resonated the most with particular communities, and the dominant messaging themes the public was exposed to, in order to effectively craft a targeted health campaign.

“The data we have about public health and healthcare is not timely, and certainly not available in real-time. We knew there had to be a better way to understand and communicate with at-risk groups.”

Dr. Joe Smyser,
CEO, The Public Good Projects

PGP leverages Zignal Labs to harness public health and healthcare conversations across the media spectrum. Insights from Zignal empowers PGP to execute data-driven health advocacy campaigns on major issues.
Here’s How

The team began with an in-depth review of the relevant literature to better understand the priority sub-audiences within rural and urban populations. They then looked more deeply at data gathered from rural and urban counties within the five states hit hardest by this epidemic: West Virginia, New Hampshire, Ohio, Kentucky and Rhode Island. By aggregating consumer and psychographic data, two profiles—rural and urban—emerged.

An online survey targeting this group rounded out these profiles, providing valuable insights into awareness, understanding and perceptions of the opioid epidemic. For instance, just over half of the respondents had heard of the “opioid epidemic” and 20 percent incorrectly classified cocaine, ecstasy and stimulants as opioids, with another 15 percent unsure what an opioid even was. Rural respondents were less likely to know that heroin is also considered an opioid and less likely to see the epidemic as affecting friends and family.

At this point, the findings made it clear that awareness would be a significant component of a good health campaign. “We knew we needed more visibility into how this problem was being framed and publicly discussed to create messages that would have a chance at resonating with our target population. For that, we turned to our partner Zignal Labs.”

Leveraging media analytics

In partnership with Zignal Labs, the PGP team collected data for a four-week period. The effort included:

- **Examine a broad range of sources**
  - **Digital**: Twitter, Instagram, Facebook, YouTube, Vimeo, forums, Q&A, review sites
  - **Online media**: News and blogs
  - **Traditional media**: Magazines, trade journals, newspapers and broadcast television

- **Ingest data associated with relevant terms**
  - Zignal Labs honed in on social media conversations and media coverage around opioid-related terms, including slang and common misspellings to capture the full range of discussions

- **Analyze the conversation to gain meaning**
  - **Identify**: Understand how the public conceptualizes the crisis
  - **Categorize**: Combining separate themes into larger categories
  - **Compare**: Correlate government-associated social media conversations with those of the general public
Results

“Using Zignal’s platform, we were able to take the unvarnished, unmediated conversations real people were having around the opioid crisis on social media, compare that to the uni-directional messaging from traditional media sources, and make sense of them both,” said Smyser. “We saw the specific geographic areas where variations on these conversations were taking place, helping us understand regional differences that could prove critical to public health.”

Most importantly, the Zignal Labs-fueled content analysis led the PGP team to a critical realization: the public discussion around the opioid epidemic has focused primarily on the government’s role and response to the crisis and, second, on the impact on affected families. But there was little practical information people could use.

“The opioid crisis is framed primarily as a policy debate going on in Washington, D.C., which is disempowering. This crisis is ravaging communities across the country, everyone has been affected by it, but the majority of messages the public are seeing are telling them to sit and wait. That’s the opposite of what the country needs right now. We need people to feel empowered to get up and pitch in. To reach out to family, friends, coworkers, and neighbors,” said Smyser. “That’s absolutely critical to shaping the next phase of our project, when we build and execute an effective public health campaign strategy that can literally save lives.”
The Future

Companies and brands routinely focus on how best to leverage media data to better understand customers and competitors. But it’s equally relevant and essential in other contexts.

“Social media is where we find people having real conversations and sharing what they truly think.”

Adam Beaugh,  
CEO and Co-founder, Zignal Labs

“As you can imagine, there is real value in understanding social conversations for government, academics, and nonprofits focused on solving complex and consequential human problems,” Beaugh said. “The trick is to separate what’s valuable from what’s merely noise—and at this scale, media and social media analytics technology is the only means to ascertain that perspective.”

Beaugh observed, “This analysis can provide powerful insights into major social and health issues of our time, guide experts to more effective strategies, and ultimately achieve better outcomes.”

Such insights can serve as the foundation for better strategic decision making, with benefits that include smarter resource allocation, refocusing on newly uncovered gaps, reframing of messages for stronger impact with target populations, etc. In the case of the opioid crisis, those elements are important as public health professionals seek to stem a tide that’s swept millions of Americans and their families away.