

# The Growth in Media Coverage, Pertaining to Deaths of Despair, in States Hit Hardest by the Opioid Crisis

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# Why so serious?

The American Life Expectancy has fallen for the past 2 years

Much of this decrease is attributed to overdoses and suicide, which some have dubbed: “Deaths of Despair” (DOD)

Opioids in particular have taken a central role in this unsettling trend

Issue seems more societal than physiological, and presents a prominent, multi-dimensional public health crisis

Public awareness is the first step

# Approach

Identify online newspapers for scraping

Selected a prominent publications from 3 states with some of the highest increase in opioid overdoses in recent years *Delaware, Wisconsin, Pennsylvania*)

Render the search-result web pages necessary for scraping, by submitting select keywords into respective search fields

Total of 15 search-result scrapes, representing 3 states and 5 search terms (*Opioid, Overdose, Suicide, Naloxone, Alcoholism*)

Commence Selenium scrapes and troublesome troubleshooting

Data Collected: **Title**, **Date**, and **Summary** of article

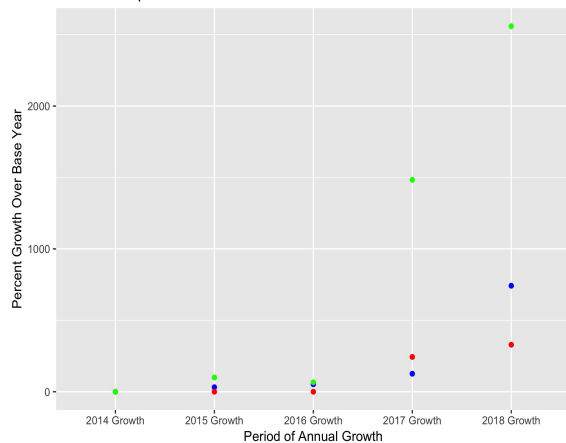
Had to troubleshoot results-pages that required scrolling, pop-up ads, mysterious disappearing text, and inconsistent article urls

Calculate the rate of base-year-change, at which different topics were discussed over time, and across states

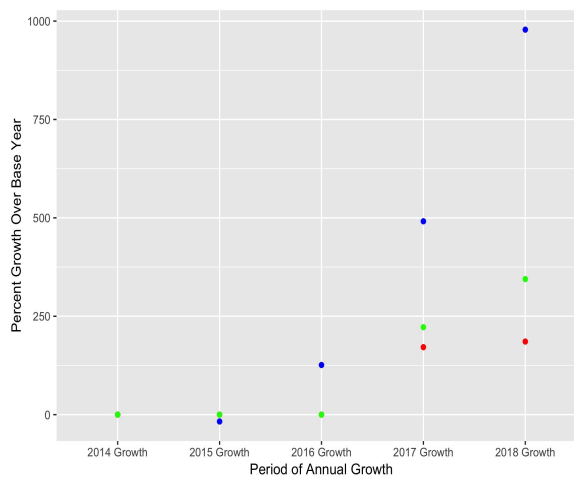
Cobble together series of minimally coded, poorly pixelated, unaesthetic graphs

# Growth in DOD Coverage by Topic

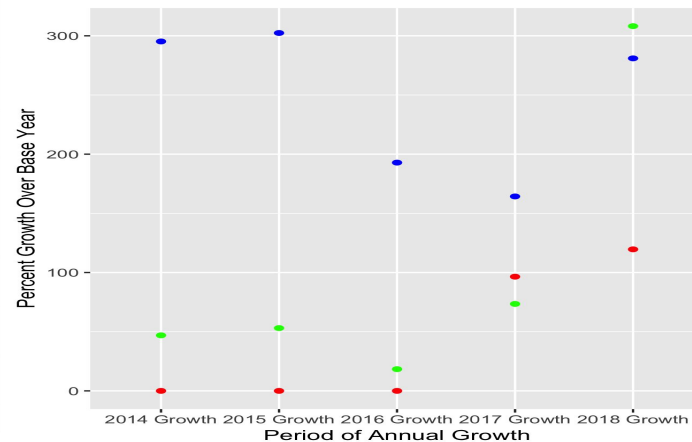
Growth in Opioid Conversation



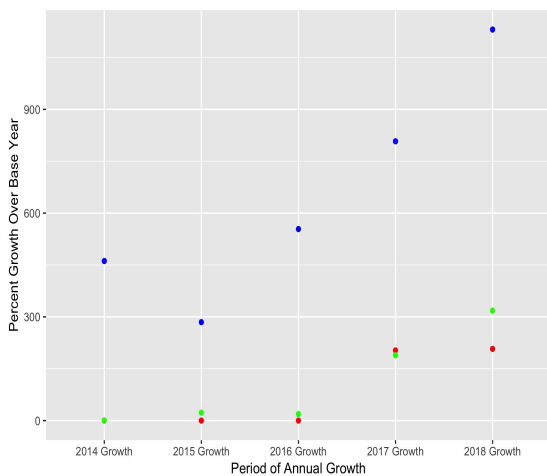
Growth in Naloxone Conversation



Growth in Suicide Conversation



Growth in Overdose Conversation



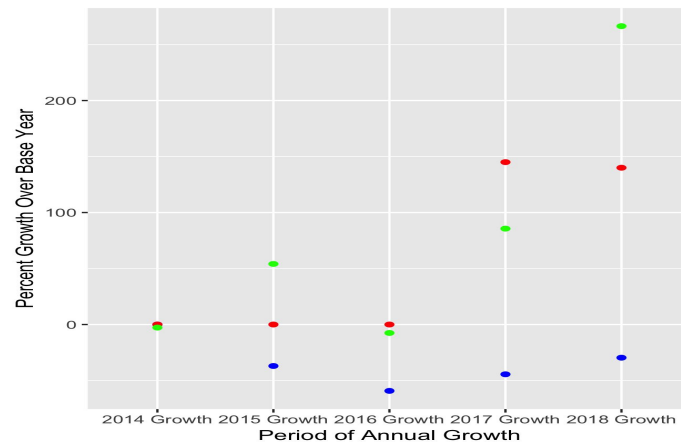
Pa = Green DE = Blue WI = Red

1000% - 2000+% growth over base-year media coverage in certain instances

Opioid conversation shows particular growth

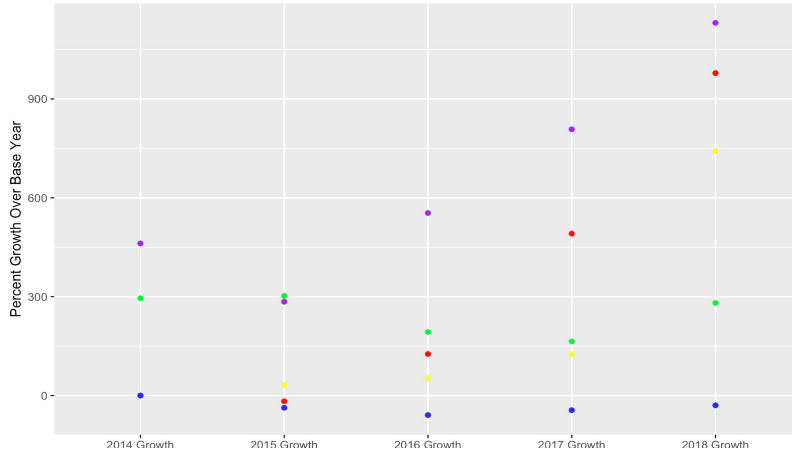
General growth across the board

Growth in Alcoholism Conversation

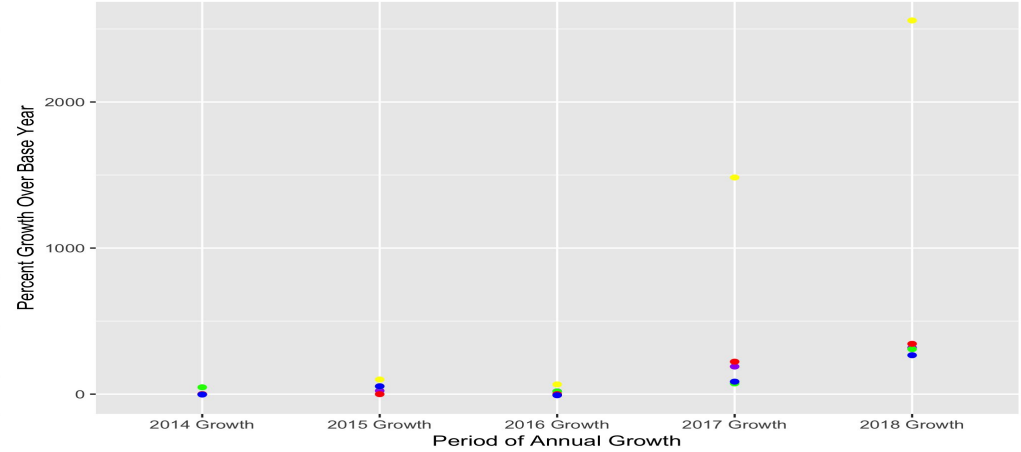


# Growth in DOD Coverage by State

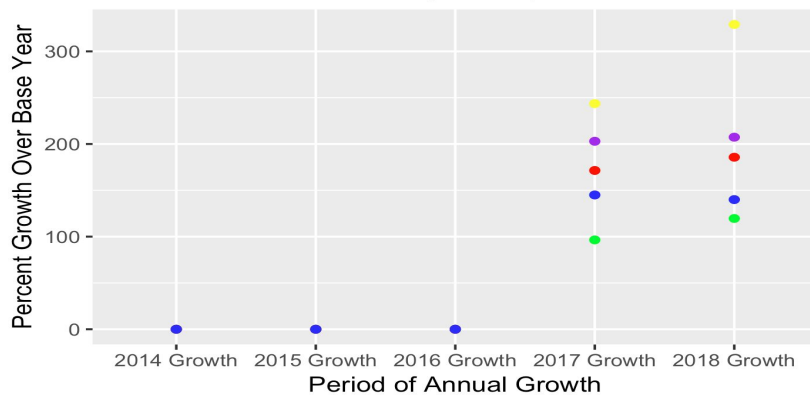
Growth in Death of Despair Topics: Delaware



Growth in Death of Despair Topics: Pennsylvania



Growth in Death of Despair Topics: Wisconsin



Opioid = Yellow    Overdose = Purple    Suicide = Green  
Naloxone = Red    Alcoholism = Blue

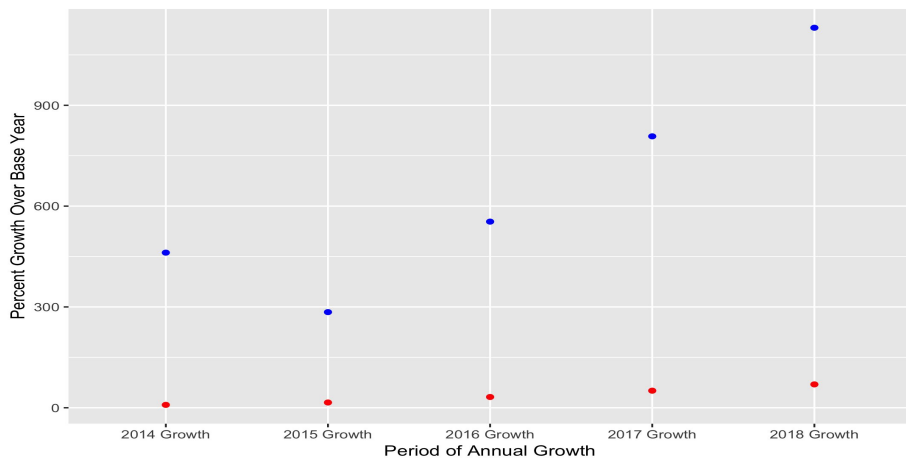
Opioid Pennsylvania

Overdose Opioid Naloxone Delaware

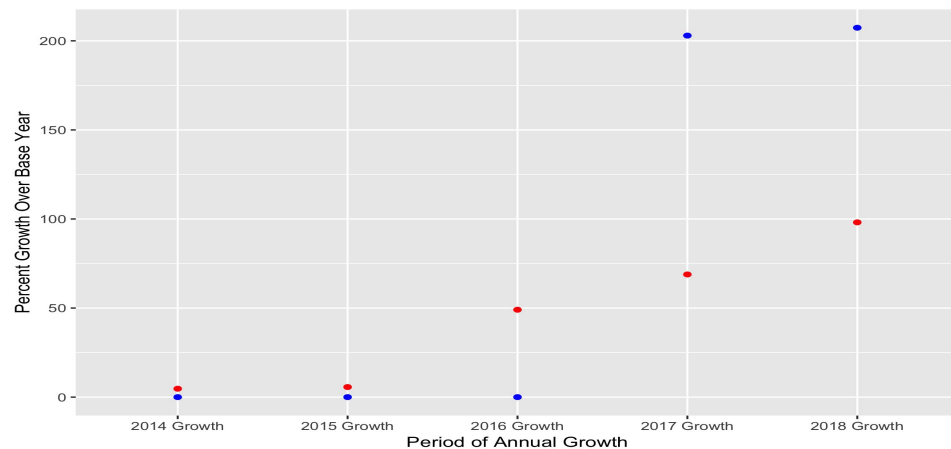
Wisconsin across the board

# Overdose Coverage v Actual Overdose Rate Increase

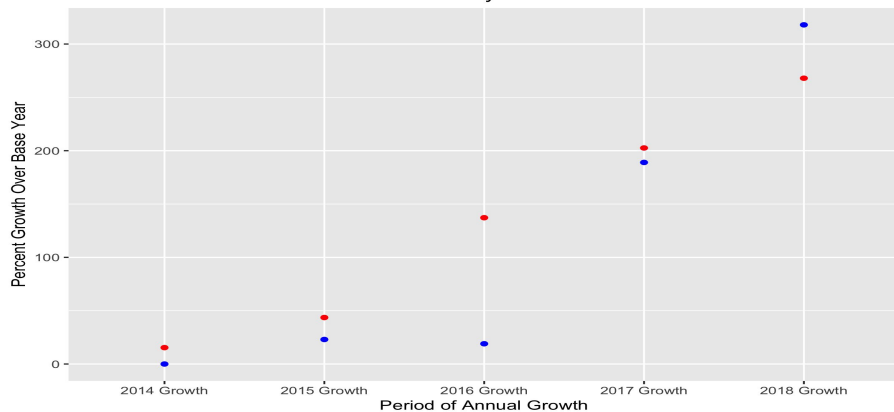
Overdose Deaths v Conversation: Delaware



Overdose Deaths v Conversation: Wisconsin



Overdose Deaths v Conversation: Pennsylvania



Overdose Coverage = Blue    Overdose Rate = Red

Pennsylvania close correlation, slight lag

Wisconsin coverage exceeds overdose increase

Delaware coverage exceeds overdose increase

Double or triple the deaths across the board

# Pennsylvania Overdose Discussion



# Potential Next Steps:

Apply web-scraping techniques to RSS platforms

Analyze additional newspapers from different states, and different newspapers within the states already analyzed

Apply web-scraping techniques to social media platforms

Expand the body of key search terms

Improve graph aesthetics