CHASING THE DRAGON: THE SOCIAL CONSTRUCTION OF THE U.S. OPIOID EPIDEMIC

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ABSTRACT

Utilizing a social construction perspective, this study uses a mixed method approach to examine the opioid epidemic. The study begins by identifying the numerous claims-making groups along with conducting a content analysis of the rhetoric and symbols used to legitimize the claims about the opioid epidemic. The data for the content analysis was obtained through a search of the websites, newsrooms, and pressrooms of claims-making groups. Additionally, the study examines and assesses the volume of money that is generated and allocated towards opioid research and prevention in an effort to determine who has more power to influence the policy initiatives. Findings show that the frequency of rhetoric and the number of claims-making groups releasing information about the opioid epidemic increased from 2010-2016. Most of the rhetoric consists of groups proposing resolution strategies and formulating new policies. Only a few claims-makers are making financial contributions towards opioid prevention initiatives and in most cases, it is a very small amount of money.

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CHAPTER 1. INTRODUCTION

The alarming number of overdoses, deaths, and hospitalizations over the past several years has elevated the concern about the opioid abuse crisis. Research shows opioids have contributed to over 33,000 deaths in 2015 with more than half involving a prescription opioid (Centers for Disease Control, 2017). About 78 people die per day from an opioid related overdose (Department of Justice, 2016; Department of Health & Human Services, 2016). Prescription drug sales have increased four-fold from 1999 to 2004 meaning doctors are prescribing about a bottle of pills per American (CDC, 2016).

Many of these statements about the dramatic rise in opioid misuse and deaths are making national headlines especially when it applies to famous actors or musicians. For example, in April 2016, singer Prince died because of a fentanyl overdose. In 2014, Philip Seymour Hoffman died due a mixture of drugs including heroin and prescription medications. Other noteworthy examples of opioid related deaths include Heath Ledger (2008), Cory Monteith (2013), and Scot Weiland (2015). Rush Limbaugh admitted his oxytocin and hydrocodone addiction after being arrested at least twice on drug related charges. Brett Favre revealed in a recent interview that he consumed a bottle of Vicodin daily just to get through the day (Brinson, 2016). Today, the headlines read: “In one year, drug overdoses killed more Americans than the entire Vietnam War did” (Lopez, 2016); “A deadly epidemic: Addiction to opioids has put an entire generation at risk” (Russell, 2017); and “Inside a Killer Drug Epidemic: A Look at America’s Opioid Crisis,” (Bosman, 2017). Stories like these along with the alarming statistics foster public perceptions about a growing problem.

These stories are showcasing the idea that the opioid crisis has no boundaries. Questions arise as to what is causing the elevated concern amongst the public about opioids. This study

analyzes the opioid issue through a social construction lens. Examining the opioid epidemic through a social construction perspective is useful because it offers insight about the societal reaction to the opioid crisis. Social construction is a theoretical perspective that sheds light on the process and development of social problems (Best, 1987; Spector & Kitsuse, 1975). The process involves defining and giving the problem a name (Blumer, 1971; Spector & Kitsuse, 1975), legitimatizing claims-makers claims about the problem, and constructing policies to resolve the problem (Spector & Kitsuse, 1975).

The observation of the above stories can foster a reaction of fear by the public leading to a moral panic. Moral panics arise due to an occurrence, incident, individual, or group of people proclaiming a certain condition threatens norms and values of society (Cohen, 1972; 1980). Some examples of moral panics include the Mods and Rockers, War on Drugs, satanic ritual abuse of children and women, video game violence, sex offenders, and human trafficking (Good & Ben-Yehuda, 1994; Cohen, 1980).

Most moral panics arise due to an intense societal response; however, the moral panic outcomes yield little to no long-lasting results (Schneider, 1985). Moreover, individuals or groups of people, also known as moral entrepreneurs, help generate support for an immediate action plan after the group has labeled a particular behavior deviant (Becker, 1963). Examples of moral entrepreneurs are Mothers Against Drunk Driving, anti-tobacco or anti-pornography lobbyists, or the pro-life movement. If the moral entrepreneurs fail to foster enough support for the social problem, it will not receive the attention it requires for social change (Schneider, 1985; Spector & Kitsuse, 1975).

Even with a large media presence, many government agencies are initially hesitant in declaring the opioid use a problem because of the likelihood of escalating public fear or causing

moral panic (Cohen, 1972; 1980). However, as cities and states experience higher mortality and overdose rates due to prescription drugs it forces public officials to react. Chauncey (1980) states government agencies only react to an emerging problem that allow them to take over control of the problem to serve their own interests (Chauncey, 1980; Spector & Kitsuse, 1975). These interests are typically based on normative values, but it is important to examine more than just beliefs and values of the claims-making groups. For claims to gain support, these groups utilize societal values as resources to define the issue as a social problem (Spector & Kitsuse, 1975).

The opioid epidemic has taken center stage as America's next social problem. Social problems are defined as "the activities of groups making assertions of grievances and claims to organizations, agencies, and institutions about some putative conditions" (Spector & Kitsuse, 1975, p. 146). Whereas, Hilgartner and Bosk (1988, p.55) define a social problem as a "putative condition or situation that is labeled a problem in the arenas of public discourse and action." The constructionist viewpoint, emphasizes a realistic or subjective approach, argues social problems arise from collective action of concern to define an issue as a problem. The process of construction does not mean that the issue/event exists, but as long as there is a shared belief by members of a particular group or society deeming it a problem it generates attention (Spector & Kitsuse, 1977; Becker, 1966). Schneider (1985) suggests focusing more on the claims-making process rather than an objective definition of social problems. A better understanding of the claims-making process may reveal how certain problems gain acknowledgment without posing an actual threat to society.

Social construction research involves outlining the stages of problem development, identifying the key claims-makers, and showcasing how the interests are related to the claims-makers (Best, 1987). The social construction process begins the formulation of the problem that

involves a group declaring the conduct as harmful and detrimental to society. Additionally, the group generates support by publicizing and stigmatizing the conduct along with convincing others there are no resources being allocated towards resolving the problem, so it becomes a political issue. Second, claims-making groups, such as official organizations or special interest groups, help legitimatize the claim because they have a stake in defining the conduct as a problem (Spector & Kitsuse, 1975; Blumer, 1971). More specifically, these groups gain power, prestige, and financial benefits by making noise about the deviant conduct. Next, the claims-making groups utilize rhetoric, symbols, and images to justify their claim by providing prevalence figures and growth claims, casting a wide net across the social spectrum, associating the behavior with evil, and claiming that current policies and practices are insufficient to address the problem (Spector & Kitsuse, 1975; Blumer, 1971). With the push to further defend their claims, these groups assist with the development or modification of policies and laws to resolve the issue. Another option is to form an alternative group to propose new methods and solutions to address the problem (Spector & Kitsuse, 1975).

Claims-makers have been documented to be a part of the development of social policy in the missing child phenomenon (Best, 1987), teenage drinking problem (Chauncey, 1980), increase in gang violence (McCorkle & Miethe, 1998), child abuse claims (Pfohl, 1977), drunk driving problem (Gusfield, 1975;1976;1981), and occult murders (Jenkins & Maier -Katkin, 1992). Gusfield (1981) highlights the importance of incorporating the scientific method to evaluate and examine not only the social problem claims but include rhetorical claims that are tools for persuasion. Since the primary objective is to convince other members of society there is an issue, many groups use the following statement to foster support: X is a problem, Y is the solution, and Z is the policy that should be implemented to resolve the issue (Best, 1987).

Therefore, it is important identify the key stakeholders and analyze rhetoric behind the claims to gain a better understanding of the claims-making process that influences public perceptions of social problems.

Research suggests prescription opioid abuse is an ongoing issue since the early 2000s. Opioid mortality rates rose over 91 percent from 1999-2002, with more than 5,500 deaths in 2002 (Paulozzi, Budnitz, & Xi, 2006). Between 2000-2014, prescription opioid overdose fatalities rapidly rose by over 200 percent (Rudd, Aleshire, Zibbell, & Gladden, 2016). Heroin overdoses and deaths are escalating at a significant rate with 2.5 deaths per 100,000 (Hedegaard, Chen, & Warner, 2015). Since the early 2000s, emergency room visits for overdoses involving non-medical use of opioids have indicated a 111 percent increase (Cai, Crane, Poneleit, & Paulozzi, 2010). According to the Substance Abuse and Mental Health Services Administration (SAMHSA), treatment admissions for prescription opioids grew from 8 percent in 1999 to over 30 percent in 2009 (SAMHSA, 2011). Over 20 percent of all treatment admissions involved opioids (SAMHSA, 2011). The information presented above raises the question as to why the concerns about opioids and heroin are now being heightened when research indicates there has been an ongoing problem.

One of the problems with the primary focus on the opioid epidemic is the reduction in attention to other drug related issues such as alcohol, tobacco, cocaine, and marijuana. This includes developing policies and providing monetary funds to address these problems. At times, the transition from one social problem or moral panic to the next occurs quickly because of the shift in attention (Goode & Ben-Yehuda, 1994). Claims-making groups with a large carry capacity, the amount of resources institutions allocate towards social problems, can keep their problem at the forefront (Hilgartner & Bosk, 1988). When a new social problem arises, it

receives the shiny new object syndrome, so people start spending time and resources toward bringing awareness. Overtime, this problem will phase out and be replaced by another. This replacement cycle continues because claims-makers with money and power dictate what receives attention while other issues are simply ignored until they generate more attention.

As an illustration; with the opioid crisis at the forefront of media coverage and policymakers' agendas, drugs such alcohol get overshadowed. The 2015 National Survey on Drug Use and Health (NSDUH) results show that over 15 million adults (18 years of age or older) and approximately 625,000 youth have an alcohol use disorder. However, only a small percentage of both groups sought treatment (1.3 million adults and 33,000 youth). Alcohol contributed to approximately 88,000 deaths from 2006-2010 (SAMHSA, 2015). In 2015, there was an estimated 10,200 deaths due to an alcohol impaired driver which accounts for about 30 percent of all motor vehicle fatalities (NHTSA, 2016). The estimated economic costs associated with alcohol related crashes in 2010 was $44 million dollars. While, the costs of alcohol misuse were $249 billion for that same year (Sacks, Gonzales, Bouchery, Tomedi, & Brewer, 2015). Binge drinking amongst youth and college students is another area of concern. Survey results reveal that about 13 percent of people ages 12-20 and 37 percent of college students reported binge drinking in the past month (SAMHSA, 2015). Research indicates that alcohol misuse during adolescence and college years can lead to array of issues including: death, injury, sexual assault, motor vehicle crashes, and academic failure (NIAAA, 2006; SAMHSA, 2015; Wechsler, Dowdall, Maenner, Gledhill-Hoyt, & Lee, 1998). Health issues related to alcohol use can result in a large amount of medical expenses or even death. For example, roughly 72,500 people died from liver cirrhosis as a result of alcohol in 2013. The consumption of alcohol increases the likelihood of cancer of the mouth, breast, liver, esophagus, and pharynx (National Cancer

Institute, 2017; NIAAA, 2017) along with accumulating $27 million dollars in healthcare costs (NIAAA, 2017). Many policy initiatives focus on reducing underage drinking. For example, the Beer Institute and Anheuser-Busch state they have contributed millions of dollars towards developing effective underage drinking programs, campaigns, and advertising (National Research Council & Institute of Medicine Committee on Developing a Strategy to Reduce and Prevent Underage Drinking, 2004). In the 2015 fiscal budget for the National Institute on Alcohol Abuse and Alcoholism, the $447.4 million went towards creating prevention programs, conducting research to reduce alcohol abuse, and bringing awareness to addiction (NIAAA, 2014). However, this is only a small fraction of the overall Department of Health and Human Services fiscal budget.

Marijuana use as well has risen in the past few decades along with marijuana fueled problems. Survey results show the number of people using marijuana in the last year has doubled from 4.1 percent in 2001 to 9.5 percent in 2013 (NIAAA, 2015). According to the 2016 National Survey on Drug Use and Health more than 28 million people have used marijuana in the past month making it the most commonly used illegal drug. With the perceptions of marijuana use becoming more socially acceptable (Johnston, O'Malley, Miech, Bachman, & Schulenberg, 2015; NIDA, 2015), it has led to a 30 percent increase in marijuana disorders (NIDA, 2015). With ten states now legalizing marijuana, research has shown that marijuana did contribute to higher rates of motor vehicle crashes and fatalities (Rocky Mountain High Intensity Drug Trafficking Area, 2016; Northwest High Intensity Drug Trafficking Area, 2016) while others state that prevalence has remained unchanged (Aydelotte, Brown, Luftman, Mardock, Texeria, Coopwood, & Brown, 2017; NHSTA, 2015). But other research reveals that emergency room visits, and hospitalizations increased more than 30% in states who have legalized marijuana

(Rocky Mountain High Intensity Drug Trafficking Area, 2016). Some adverse health effects of long-term use of marijuana include: addiction, infant brain defects, poor educational attainment, lung cancer, or upper respiratory diseases (Volkow, Baler, Compton, & Weiss, 2014; Hall, 2009). Projected costs associated with marijuana prohibition in California range from $150 million (Caulkins & Kilmer, 2014) to $1.87 billion (Miron, 2010), $12 million in Colorado (Stiffler, 2012), and approximately $8.7 billion nationally (Miron, 2010). Most of these costs are associated with law enforcement and incarceration expenses. Furthermore, the prevalence of interstate diversion of marijuana has risen by as much as 40% in Colorado (Rocky Mountain High Intensity Drug Trafficking Area, 2016) and between 7-12% in Washington State (Hanson, Miller, & Weber, 2017). In 2015, the National Institute of Health spent $110 million on hundreds of cannabinoid related research projects (NIH, 2017) which is only a small portion of their overall budget.

According to the 2015 National Survey of Drug Use and Health, over 950,000 people over the age of 12 reported using cocaine in the past year which is a 26 percent increase from 2014 and 61 percent increase from 2013 (NIDA, 2016). The number of cocaine overdoses and deaths has been on a steady rise since 2012 with 4400 deaths to 6800 in 2015 (NIDA, 2016; CDC, 2016). Cocaine contributes to a large quantity of emergency room visits, approximately 488,000 in 2010 (DAWN, 2012). Long-term health effects from cocaine includes numerous psychological and physiological issues from fast heartbeat, elevated body temperature and blood pressure, tremors, paranoia, malnourishment, and Parkinson's (NIDA, 2016). Furthermore, users who inject the drug are more likely to develop HIV along with Hepatitis C (NIDA, 2016). There are no specific details on how much money is spent on cocaine prevention or research.

More than 36 million adults in the United States smoke cigarettes leading to approximately 480,000 deaths per year (CDC, 2016). Cigarette smoking causes an array of adverse health effects which has caused a large quantity of premature deaths (CDC, 2016). Many people develop health risks such as lung cancer, chronic obtrusive pulmonary disease (COPD), heart disease, and other forms of cancer and respiratory illnesses affecting bodily organs (CDC, 2016). Additionally, Americans spend about $300 billion a year on tobacco related expenses with more than $170 billion going towards medical bills (CDC, 2016) while tobacco companies spent approximately $9 billion in 2014 which is about $1 million per hour on advertising tobacco products (Federal Trade Commission, 2014). The current trend involves over 18 million young adults smoking e-cigarettes. Many tobacco companies are directing $115 million towards e-cigarette advertising campaigns (CDC Vital Signs, 2016). Numerous governmental agencies and special interest groups spend millions of dollars on tobacco prevention by focusing on anti-tobacco campaigns and policy initiatives (CDC, 2013). In 2016, states spent approximately $460 million on tobacco prevention and North Dakota is the only state which operates CDC recommended tobacco programs (Campaign for Tobacco Free Kids, 2015).

Doctors are facing repercussions because of the opioid epidemic especially on prescription practices. Survey results indicate that many physicians, more than 50 percent, are curbing opioid prescriptions because of the risk of addiction (Freyer, 2017). A recent Gallup-Palmer College of Chiropractic (2017) study indicates that most Americans would rather utilize alternative treatments for physical pain than use prescription medications. Another survey indicates that nearly 70 percent of people agree with the governmental guidelines to restrict strong prescription painkillers to three days or less when treating acute pain (STAT-Harvard T.H. Chan of School of Public Health, 2016). More than a third of doctors surveyed indicate

limiting access of prescription drugs to patients with chronic pain will further cause harm (Boston Globe, 2017). A consequence physicians face when making adjustments to their prescription practices is that poorer patient satisfaction declines (Zgierska, Miller, & Rabago, 2012). Since hospital or healthcare administrators expect physicians to provide the highest quality patient care, doctors who fail to meet this standard will see a reduction in their compensation (Zgierska, Miller, & Rabago, 2012).

Another area that has received little attention is the child welfare system because the focus remains on opioid prescription policies and addiction treatment. Adoption and foster care rates in many states have risen dramatically in the past several years, consequentially because of the rapid rise in opioid abuse. In Ohio, more than 50 percent of children in foster care had a drug abusing parent. Some states are seeing between a 16-25 percent increase the number of children entering foster custody in the past year (Wiltz, 2016). According to the Department of Health and Human Services (2017), approximately 425,00 children are currently in foster care with more than 32 percent being removed because of parental substance abuse. Furthermore, an estimated 2.5 million grandparents are now raising their grandchildren due to opioid deaths (Annie E. Casey Foundation Kids Count Data Center, 2016). More than 40 percent of children live with relatives because one or both parents have substance abuse issues. Numerous states are seeing large influxes of children into the system, but lack the necessary resources and funding. For example, in Ohio the Attorney General is providing a million dollars in grants for child welfare agencies to help recruit more foster care families and hire additional staff (Ohio Attorney General's Office, 2017). A consequence of the rapid increase in opioid overdoses and deaths is the alarming quantity of children under the care of child protection services however; this another social problem yet to receive any sort of societal interest.

The increasing rate of opioid use, overdoses, and deaths is perceptibly a large concern for the American public. Current research on this topic focuses on analyzing media content rather than investigating the key claims-making groups who serve as media's main sources of information. Utilizing a social construction perspective, this study uses a mixed method approach to examine the opioid epidemic. The study begins by identifying the numerous claims-making groups along with conducting a content analysis of the rhetoric and symbols used to legitimize the claims about the opioid epidemic. The data for the content analysis was obtained through a search of the websites, newsrooms, and pressrooms. Additionally, I examine and assess the volume of money that is generated and allocated towards opioid research and prevention in an effort to determine who has more power to influence the policy initiatives. This study fills the void in the research literature because it explores the social construction of the opioid crisis with an emphasis on the claims-making groups.

CHAPTER 2. LITERATURE REVIEW

To understand the context of the U.S. opioid epidemic, it is important to discuss previous research and the theoretical framework. This chapter presents the historical context of heroin and opioids, discusses the current research on opioids, outlines the social construction theoretical framework, summarizes the drug scare perspective, and outlines the plan for the current study.

Historical Context of Heroin and Opioids

The history of heroin and opioids is presented through five eras starting from the late 1800s through today.

First Era: 1880s through 1920s

In the late 1800s, opium started to become a popular drug in the United States after being introduced by China. Many opium dens started arising in the wild west especially in gold mining towns. At first, many whites did not start "hitting the pipe" until numerous men and women are observed being high in the streets of San Francisco (Jonnes, 1996). The police were more worried about the Whites consuming opium rather than the Chinese. This was especially true after many local cigar and smoking shops became a cover for opium dens occupied by high class white females in various cities across the country. As a result of the widening use by both mature adults and youth, state legislatures passed tougher laws not only addressing smokers but people running opium dens (Jonnes, 1996). However, physicians started to become cautious about effects of opium. The Pure Food and Drug Act of 1906 enforced drug makers to disclose the heavy doses of opiates in medicines and informing potential consumers (Jonnes, 1996; Hoffman, 2012). With an estimate of more than 70 million Americans using opium, numerous state legislatures, American Medical Association, and American Pharmaceutical Association joined

forces to push for an antidrug policy that required a doctor's prescription in order to obtain opiates.

While trying to convert morphine into codeine to treat pain, Dr. Felix Hoffmann formulated heroin, twice as potent as morphine. Heroin is first introduced to doctors and healthcare professionals as cough suppressant to treat respiratory illnesses such as pneumonia, whopping cough, bronchitis, and tuberculosis (Jonnes, 1996; Fernandez & Libby, 2011). Since heroin is deemed as non-addictive, physicians utilize it for other various medical applications such as childbirth, serious injuries, and treat mental illness. Similar to opium, physicians became alarmed about increases in the heroin dosages noticing that many patients are becoming addicted to the drug. Additionally, doctors who stop the heroin treatment start observing signs of opiate withdrawal including restlessness, nausea, pain in legs and back, and excessive sweating (Jonnes, 1996). In the early 1900s, heroin is recognized as another addictive drug. However, this did not stop Americans from smoking or sniffing heroin as they just wanted to achieve a euphoric high. Addicts focus on getting high leaving ambition towards work and life becomes less prevalent (Jonnes, 1996).

After the implementation of the Harrison Narcotics Act in 1914, the importation of opium was reduced dramatically (Redford & Powell, 2016). The primary purpose of the act is to decrease access to numerous drugs including opium and heroin as well as criminalizing users and doctors (Jonnes, 1996). Access to heroin became limited while prices were inflating after the passing of the new antidrug law. As the word about the euphoric feelings produced by heroin hits the streets, women and men of various ages, from different parts of the country, and socioeconomic status started coming to brothels, poolrooms, and gambling shops to sniff or inject heroin, which fostered new relationships with current addicts (Jonnes, 1996). Antidrug

legislation and removing doctors' ability to write prescription for narcotics does not seem to faze heroin addicts need for the drug.

Second Era: 1940s-1950s

With the hype of jazz music, many musicians started using heroin instead of marijuana because it was deemed hipper (Jonnes, 1996; Singer & Mirhej, 2006). The postwar drug culture involves a transition amongst heroin users from white males in industrial areas to inner city blacks due to Italian American gangs revitalizing the old trafficking routes (Jonnes, 1996). During the 1940s, these jazz musicians were called hep-cats who wrote and played music while high on heroin. Some notable musicians who use heroin include Billie Holiday, Ray Charles and Charlie Parker. It is estimated that more than 50 percent of hepsters had experience with hard drugs, nearly 25 percent became addicted, and approximately 20 percent died due to heroin (Jonnes, 1996). The U.S. Treasury's Narcotics Division, established in 1923, remained focused on enforcing drug laws by arresting street dealers, addicts, and doctors. However, heroin rates continue to rise in northern cities which are now occupied by economically and socially marginalized blacks who do not know the detrimental effects of the drug. The hepster lifestyle is the ideal so people are encouraged to become a heroin addict to be accepted into the culture (Jonnes, 1996).

Doctors started noticing the large quantity of admissions for narcotics, especially heroin, for the black population at treatment facilities. Admissions rates across cities and states were as high as 40 percent. Even the Federal Bureau of Narcotics estimated the number of heroin addicts reached 750,000, the rate of black heroin addicts was over 50 percent (Jonnes, 1996). This also led to several hundred arrests of blacks. The Bureau responded by targeting the Corsican gangsters and U.S. mafia distributors to reduce the quantity of heroin reaching the streets of the

U.S. (Jonnes, 1996). The access and flow of heroin increased rapidly after the U.S. and French governments generated alliances with drug lords to eliminate the spread of Communism. The drug lords were supplied with ammunition, guns, and air transportation for the manufacture and sale of opium (Jonnes, 1996). These are some the reasons for the rapid escalation of heroin on American streets leading to overdoses and deaths.

Third Era: 1960s-70s

The continuation of the hipster culture leads to a drastic increase of overdoses and deaths. Overdose fatalities rose thirty times from 1950-1970. Addicts, street dealers, drug traffickers, doctors, and pharmacists are at the forefront of the Narcotics Bureau after the implementation of antidrug legislation (Jonnes, 1996). The enforcement strategies resulted in an escalation of arrest and incarceration rates because addicts are committing a high rate of crime. To help solve the problem with heroin addiction, methadone maintenance clinics were established to handle withdrawal. Patients also received counseling and social services leading to a decrease in arrests while employment and school enrollment rates skyrocketed (Jonnes, 1996). The U.S. involvement in the Vietnam lead to two significant outcomes: 1) surge of illegal heroin trafficked into the states and 2) many soldiers became addicted to opium and would bring it back upon their return to the U.S. Furthermore, the Central Intelligence Agency (CIA) aided in the air transport of opium to other countries to decrease the access to the U.S. and Vietnam who are facing heroin crises (Jonnes, 1996; Ciccarone, 2009). However, the effects of this strategy generated the importation raw opium from Mexico and eventually from the Middle East.

Society's atmosphere was full of opposition and agitation because of the Vietnam War and other governmental policies. It encouraged people to be free and experiment with new things because the country was already in turmoil (Jonnes, 1996). Young people had carefree attitudes

indicating using drugs was socially acceptable. Music also revolutionized the culture through popular songs discussing the euphoric state of mind. With the 800 percent rise in juvenile drug arrests, President Nixon established the Drug Enforcement Agency (DEA) to combat the heroin misuse amongst the nation's youth (Jonnes, 1996). This federal agency was established to address the drug problem rather than multiple agencies with their own agendas. The primary focus of the DEA was to reduce the import and demand for heroin.

Fourth Era: 1980s-90s

Injecting heroin started gaining popularity among addicts which increased the transmission of HIV, Hepatitis C, and sexually transmitted diseases (STDs) from the contamination of needles. Moreover, the potency of heroin improved leading to a higher rate of overdoses and fatalities (Jonnes, 1996). The War on Drugs is one of the many policies initiatives implemented to eliminate the American drug crisis. First Lady Nancy Reagan introduced the "Just Say No" campaign encouraging students not to experiment with drugs. Arrest and incarceration rates increased drastically with antidrug legislation (Jonnes, 1996; Moore & Elkavich, 2007; Mauer, 2001). However, the focus of policymakers transited to fostering other democratic countries to push for law-abiding behavior and economic alternatives (Jonnes, 1996). The fiscal budget for combatting drugs has quadrupled over the past fifteen years.

Most of the heroin, called chiva, was being smuggled into states alongside the border. Cities in Texas had a large influx of black tar heroin (chiva) overdoses, deaths, and emergency room visits especially among youths (Gray, 1999; Colloff, 1999). On an average night, hospitals treat three or four overdoses. This was because chiva is a more potent form of heroin than was currently on the street (Gray, 1999; Colloff, 1999). City officials responded by establishing a high intensity drug trafficking team utilizing law enforcement strategies to eradicate the problem.

A similar trend occurred with a purer form of heroin called cheese in Dallas, TX in the early 2000s (Maxwell, Coleman, Feng, Goto, & Tirado, 2012). Heroin overdoses, fatalities, and hospital visits were the highest amongst Hispanic males under the age of twenty (Maxwell, Coleman, Feng, Goto, & Tirado, 2012).

Opioids were first introduced in the U.S in the late 1970s by Knoll, a German pharmaceutical company. At first, many doctors were hesitant in prescribing opioids to patients however, as time passed doctors explored the idea of treating patients with non-terminal diseases with opioids. In the 1990s, physicians started to prescribe opioids more frequently to treat patients with different pain needs (Volkow, 2014). With the increase demand for opioids, pharmaceutical companies started to formulate new opioid medications. As a result, the prevalence opioid misuse and abuse was escalating. A 1999 survey conducted by National Institute of Drug Abuse (NIDA), estimates 4 million people or 2 percent of the population aged 12 or over, used prescription drugs for non-medical purposes (NIDA, 2001).

Fifth Era: 2000s-Today

The number of prescription opioids escalated from 76 million in 1991 to 207 million in 2013 (Volkow, 2014). This allowed for the additional development other opioid related medications including oxycodone, fentanyl, and hydromorphone. Pharmaceutical companies marketing efforts grew exponentially to include a variety of healthcare professionals with the primary goal of addressing pain. With the increase access to prescription opioid drugs, including drugs such as Vicodin, Oxytocin, and Percocet, lead to higher rates of overdoses, deaths, and emergency room visits. Between 2004 and 2015, the rate of emergency room visits related to opioid abuse rose 99 percent from 89.1 per 100,000 population to 177.7 (Weiss, Elixhauser, Barrett, Steiner, Bailey, & O'Malley, 2016). However, this did not decrease the marketing efforts

by pharmaceutical companies in promoting opioid drugs to healthcare providers until a federal lawsuit against one of leading opioid manufacturers. In 2007, Purdue Pharmaceuticals agreed to pay $600 million dollars in federal fines and civil lawsuits (Meier, 2007). The company along with three top executives were found guilty in federal of misleading doctors and patients about the risk of addiction and abuse of Oxytocin. In response to the higher rates of opioid misuse and abuse, pharmaceutical companies worked alongside the Federal Drug Administration (FDA) to formulate abuse deterrent drugs.

The United States has the highest consumption of prescription drugs in the world so it should be no surprise the cost of prescription drugs is on the rise. The U.S. consumes approximately 80 percent of the world opioid supply, and 99 percent of the world hydrocodone supply (Solanki, Koyyalagunta, Shah, Silverman, & Manchikanti, 2011). The cost of prescription drugs skyrocketed in 2000 by over 14 percent, but cost increases slowed down until 2013. Again, in 2014 the costs climbed sharply by 11.4 percent then only increased by 6.8 percent in 2015 (Cox, Kamal, & Jankiewicz, 2016). Because of the excessive prescription drug costs, people are now switching to heroin. Survey results show that three out of four heroin users started using prescription drugs before heroin (CDC, 2017). Research shows that the number of heroin users have nearly doubled from 380,000 to 670,000 from 2005-2010 (Volkow, 2014). Heroin overdoses have yielded similar trends as opioids. In 2010, there were approximately 2,800 heroin overdoses which is nearly a 50% increase from the early 2000s. From 2010-2015, the number of heroin overdoses have nearly tripled with about 13,000 heroin related deaths in 2015 (CDC, 2017).

Current Research

Media depictions of the opioid epidemic is the primary area of current research. Many researchers are focusing on searching nationally-known newspapers to learn how opioids are being framed in the media (Orsini, 2017; King, 2014; Whelan, Asbridge, & Haydt, 2011). Using the moral panic perspective which falls in line with the social construction framework, studies are analyzing how various drugs such as opioids and heroin are becoming the nation's next moral panic. With a large amount of media attention surrounding the epidemic it is no surprise that studies are being conducted in this way. This literature provides insights to narrative on the opioid epidemic and how the media impact public perceptions.

Orsini (2017) examines segments on evening news broadcasts related to cocaine and heroin from 2000 to 2015. Contents analysis collected data frames from news stories that focus on the drug suppliers or distributors, drug fight, use, and potential victims. Findings shows many news stories consist of prevention and enforcement strategies, potential risks with drug use, crime associated with participating in the distribution of drugs, and the horrific outcomes that happen to prominent figures (Orsini, 2017). Furthermore, results show that majority of the news coverage from 2009-2015 is about famous people who have died or overdosed at the hands of prescription medication, opioids, cocaine, and other illegal drugs. During this same time frame, numerous stories are now beginning to indicate the presence of a drug epidemic because of the high rates of drug overdoses and deaths. Words such as plague and epidemic are found in many of the news stories to incite fear and discuss the danger posed with drug use and addiction. The author argues many of the media frames tend to align with societal reactions, stereotypes of drug use, and stigmatization of addiction which are found within media coverage of drugs during the 1980s and 1990s.

Serious concern over the dramatic rise in use of OxyContin in Ontario, Canada started receiving more media attention. King (2014) analyzes of various forms of texts to examine how pharmaceutical companies and state agencies legitimatize the use and need of OxyContin. Data is gathered from various media sources such as policy documents, research reports, press or news releases from government agencies, advocacy groups, think tanks, professional associations, and law enforcement agencies; newspaper, magazine, and internet stories of the drug; and documents and reports from the legislative branch in Ontario. The author concludes that pharmaceutical companies and state agencies are using the rhetoric to convince the public that OxyContin is beneficial. These rhetorical strategies continue to rise in response the growing concern that the drug is a public health crisis. More specifically, agencies are utilizing their platform to help distinguish between correct from incorrect use of OxyContin in the hopes it generates more positive attention from the public. Several attempts are made to disclose only the advantages of the drug such as the financial benefits and living a pain free life rather than the risk posed to public health and safety such as addiction and death (King, 2007).

In similar study, Whelan, Asbridge, and Haydt (2011) investigate the media coverage or depictions of OxyContin in medical journals and newspapers in North American between 1997 – 2005. Most of the news stories on OxyContin center on the negative aspects of the drug including misuse, addiction, violence, and death. While, little coverage is given to the benefits of treatment of the drug. Furthermore, law enforcement or judicial viewpoints make up most the news coverage rather than medical or health related viewpoints (Whelan et al. 2011). Among health or physician perspectives, the findings show there is a large discrepancy on the representation of OxyContin in the subjects of pain management and addiction. Within the medical literature, there are copious amounts of articles that say OxyContin is a problematic

drug. The authors suggest these inconsistencies, especially by medical professionals, led to the continuation of rhetoric emphasizing the adverse effects of the drug. Much of the news coverage and medical messages helps to further influence the public perceptions that OxyContin is a growing social problem.

A recent of study about opioid misuse from 1998-2012 reveals that news accounts tend to indicate this is a criminal justice problem while experts indicate it is a public health issue (McGinty, Kennedy-Hendricks, Baller, Niederdeppe, Gollust & Barry, 2016). Furthermore, many media reports state the underlying cause of the problem is illegal drug distribution and the appropriate solution is to arrest and prosecute the people partaking in this illegal behavior. However, over time more preventive and treatment measures started receiving more attention from the media with the continuous rapid rise in opioid addiction and mortality. The focus of the opioid crisis is shifting towards more public health and medical strategies, but there is a stigma surrounding substance abuse treatment. Without this change in framing of the opioid crisis, the public wouldn't be able to apply pressure for action to resolve the issue or would continue to think the law enforcement is only suitable approach.

Another research approach is to explore the racial disparities in American drug epidemics. Netherland and Hansen (2016) examine historical White drug epidemics of the 1990s and early 2000s that affected a large percentage of White suburban and rural Americans. With little research on the influx of White drug use, this study uses a nontraditional methodological approach to examine of the treatment of White American drug users. More specifically, the authors evaluate four unique areas of they describe as "technologies of whiteness" (Netherland & Hansen, 2016 pg. 670): neuroscience, pharmaceutical technology, legislation innovation and marketing to learn more about the outcomes for White drug users. Some of the conclusions

indicate that White drug users are less likely to receive punitive sentences, their drug use or addiction is treated as a biological disease, and pharmaceutical drugs are more likely to be decriminalized. In many instances, racial minorities are often stigmatized and criminalized for drug abuse. Whereas, the focus of White drug users is about how addiction is a disease and pharmaceutical companies marketing directives take aim at White suburban Americans because they can afford both the prescription and withdrawal medication (Netherland & Hansen, 2016). Another common pharmaceutical initiative is selling physicians and potential patients on the idea prescription opioids is a pain-reliever and abuse deterrent. However, this is what lead to a rise the use of opioids among White Americans.

Media depictions of opioid users have changed drastically overtime. McLean (2017) conducted a qualitative analysis of news stories regarding three significant heroin outbreaks in Pennsylvania. Data collected from two regional newspapers provide information on users, the drug, dealers, and suggested solutions. Results show differences of news representations based on gender, class, race, and place of residence. African Americans or inner-city victims in 1988 were less likely to receive any news coverage or compassion whereas, there is a drastic increase in news stories on Whites and suburban victims during the 2014 crisis (McLean, 2017). Findings are consistent with the idea low-income racial minorities receive more harsh criticisms regarding drug use in comparison to White, middle-class Americans who reside the suburbs. For example, the words used by the media to describe drug users have changed drastically overtime from career drug users and junkies, addicts with a disease to normal people and accidental addicts. Similar patterns are observed for media depictions of drug dealers and proposed solutions, but the descriptions for the underlying cause for the drug problem changes from criminal justice to public health, medical, and criminal justice. In three different time periods, this study showcases

the societal reaction to the rapid rise of opioid deaths and abuse is driven by media representatives.

A similar study by Netherland and Hansen (2016) utilized a content analysis to examine the racial disparities in the newspaper coverage of opioid and heroin users. Findings from a search of national newspapers from 2001-2011 reveal that drug amongst racial minorities receive little to no news coverage. When stories are written many are very short and only report if arrests are made, the quantity of dugs recovered, or names of individuals involved (Netherland & Hansen, 2016). New accounts regarding drug use by White suburban Americans indicate this behavior is new and dangerous. Numerous reports highlight that Whites opioid addiction began as a result of using a parent or close relative prescription medication, hanging out with bad people, or obtaining a prescription for injury or illness. Drug policies for Whites focus on treatment and punishments are less punitive which is completely opposite than racial minorities. Since media narratives can influence public perceptions and reactions, it is important to understand the crucial role in the radical discrepancies in narratives and images of certain social problems especially drug use. The authors conclude that the differences in reporting can inflict harm upon a certain group of people or the development of unwarranted policies (McLean, 2016).

The majority of the media representations on the opioid epidemic are negative as the reporting emphasizes the criminal justice problem such as arrests of drug dealers, deaths of users, and the ongoing drug fight (Orsini, 2017; McGinty et al. 2016; McLean, 2017). Furthermore, there are even inconsistencies within the medical rhetoric because some experts highlight the pain relief benefits while others stress the adverse health effects (Orsini, 2017; Whelan et al. 2011; Netherland & Hansen, 2016). Current research highlights the critical role the media plays

in framing the opioid crisis because of the rhetoric and images used to insist there is a growing problem. This leads people to believe that an opioid epidemic when perhaps it is socially constructed. However, current literature has only examined the news coverage of opioid use which limits the knowledge we know about the epidemic especially from the social construction perspective.

Social Construction Theoretical Framework

According to the social constructionist perspective, social problems arise from a societal response to a particular behavior or action (Blumer, 1971; Spector & Kitsuse, 1973). Since the societal response tends to focus on the worst-case scenario, many problems are social constructed (Blumer, 1971; Spector & Kitsuse, 1973; Best, 1987). The primary goal of social constructionists is to "describe and explain the definitional process in which morally objectionable conditions or behaviors are asserted to exist and the collective activities which become organized around those assertation.' This requires the focus to become "how those definitions and assertions are made, the processes by which they are acted upon by institutions, and how those institutional responses do or do not produce socially legitimated categories of social problems and deviance" (Spector & Kitsuse, 1977, pg. 72). However, there are conflicting theoretical approaches to social problems.

The objectivist perspective defines a social problem as an act that poses an actual dangerous risk to society with the intention to cause harm to human life (Goode & Ben-Yehuda, 1994). Similarly, a functionalist approach considers this threat, but in terms of social breakdowns, conflict between roles and morals, and a defiance of societal norms (Spector & Kitsuse 1973; Goode & Ben-Yehuda, 1994). Value-oriented perspective evaluates not only the development of a social problem, but considers the valued-based decisions by those affected by

the problem (Spector & Kitsuse, 1973). In addition, this perspective wants to establish preventive solutions to the problem to reduce the value conflict. Rather than utilizing objectivist or value-oriented approach, many authors (Blumer, 1971; Spector & Ktisuse, 1973) use a constructionist or subjective perspective to explain and outline the process of which members of groups or societies define a social problem. Furthermore, constructionists argue that social problems are constructed by humans instead of existing objectively (Schneider, 1985; Best 1987; Spector & Kitsuse, 1977). This perspective also highlights an act or condition does not have to be real to be considered a problem. Within this framework, Spector & Kitsuse (1973, pg. 146) define a social problem as "activities of groups making assertions of grievances and claims to organizations, agencies, and institutions about putative conditions." Many of these definitions form as a result of social movements, conflicts, social conditions or structures, history, and individuals (Goode & Ben-Yehuda, 1994).

Social problems do not necessarily arise from making a single statement about an act or behavior, but can formulate in a variety of different ways. These include: 1) members of a group or society who plan to lobby, protest, or raise attention to a specific condition or act (Best, 1990); 2) laws and legislation are formulated to address the act or condition including people contributing to it (Best, 1990; Gusfield, 1981); 3) the public tends to rank an act or condition using a criterion about issues that yield the most devastating effects on the country (Best, 1990); and 4) a large presence of the problem in a variety of different forms of media: newspaper, television, and film (Best, 1990).

The constructionists' viewpoint involves examining the development of social problems. However, there are different social construction models. Blumer (1971) outlines a five-stage model that includes describing the emergence, legitimatization, and mobilization of a social

problem along with the formation and implementation of a plan to address the problem. According to Downs (1972), the first social construction stage is gathering information about the problem beforehand. The next step is the discovery and optimism surrounding the problem followed by the realization of costs that leads to the decline of public interest. The final step consists of post-problem effects. While, Peyrot (1984) tends to focus on the development of policies in response to social problems. The first stage is mobilizing agitation about the social problem followed by the policy construction and application. This leads to program modifications and reform anxiety about the social problem. Spector and Kitsuse (1973; 1977) utilize an alternative approach to evaluate social problems.

Rather than just focusing on the conception of the social problem, Spector and Kitsuse (1973) evaluate the role of claims-making groups. In this model, the main components of the social construction process involve explaining the formulation, preservation, and history of claims-making and actions of these groups. This perspective provides more details on the involvement of social institutions and agencies in the construction of social problems. The purpose is to gain additional information on the political, social, economic, and legal action of these groups. Spector and Kitsuse (1973) argue the natural history model describes and reveals the collective actions, phases, elements, or practices of social problems. Understanding the progression of a social problem at each stage outlines the elements, people, or actions that take part in the development. Furthermore, this natural history model is what lead to the generation of Spector and Kitsuse's (1973) four stage model.

The first stage of their proposed model is the formulation of the social problem. More specifically, it is important for claims-makers to declare and publicize their claims. Claims-making groups are examples of groups who will initiate this process of creating, responding to,

and mobilizing others to address deviance by highlighting the social, political, moral, medical, and economic implications. Jenkins (1992) states that key stakeholders that hold the role of claims-makers include individuals or moral entrepreneurs, lobbyists or advocates for a specific issue, professionals from an array of disciplines, and social movements. The original group making the claim does not even have to be victim of the action or behavior being highlighted, however, it is important to have a stake or interest in the claim (Spector & Kitsuse, 1973). Furthermore, owning a problem (Gusfield, 1981), means a group has a responsibility to acknowledge ownership of the problem and know all the details and information about it since it is given the quality of attention and reliability. Ultimately, this ownership allows these groups the power to influence a variety of public forums to establish policies to resolve the issue (Gusfield, 1989). Without the development of a definition, the problem does not become relevant (Gusfield, 1981) because it is not given a name (Best, 1987).

According to Spector and Kitsuse (1973), claims that reach the public domain and result in future actions typically are backed by powerful groups, detailed claims, and the methods and tactics to bring awareness to the issues. In terms of power, groups that have a larger carrying capacity (Hilgartner& Bosk, 1988) are able to rally to yield more support for the claim by using intimidation strategies (Spector & Kitsuse, 1973). Without establishing power, groups face an uphill battle when it comes to making significant threats if no action is taken. Many times, claims fail to generate awareness because the displeasure with the issue is unclear or the group does not know how to communicate their frustration adequately (Spector & Kitsuse, 1973). This is turn highlights the importance of constructing a well-organized claim that effectively expresses the dissatisfaction. For the claim to gain recognition, groups must utilize the proper communications

channels (Spector & Kitsuse, 1973). There are wide variety of mechanisms that allow claims-groups to increase the pressure and presence of a problem.

For claims to gain attention, claims-making groups must draw attention to it by using rhetoric, symbols, and images. The sole purpose of utilizing rhetoric and symbols is persuasion and raising alarm about the growing problem (Best, 1987). Using words such as plague, crisis, epidemic, and dire problem causes alarm amongst society that this issue is a problem that must be resolved. Claims-makers incorporate words like these to incite fear and panic to produce an elevated reaction from the public. In addition, these words dramatize the behavior or problem to help promote its devastating and wide-ranging effects (Reinarman, 1994). The purpose behind using these words is to exaggerate the effects of the problem to foster support and public perceptions. Without a reaction from society, the social problem will not be given a name or receive the necessary attention. Domain statements contain many similar words with the goal of grabbing attention of an unrecognized social problem (Best, 1987). If the domains statements are well-executed, the problem will receive national attention from numerous claims-making groups and the media. For example, the missing children phenomenon incorporates domain statements to bring awareness to the campaign and develop a more inclusive definition of a missing child. Additional examples of social problems where advocacy and special interest groups utilize domain statements include sex trafficking, school shootings, drunk driving, and the use other illicit drugs (i.e. – cocaine, methamphetamine). Claims-makers with a national recognition are going to jump on board to promote the problem with their own interests in mind (Hilgartner & Bosk, 1988; Jenkins, 1992). As the number of claims-making groups increases in support of the problem it yields more interest. To maintain the interest, claims-makers must use the media to keep the public's attention (Spector & Kitsuse, 1973).

The problem formulation is the first crucial step in the social construction process to bring attention to conduct seen as deviant from societal norms. Claims-making groups use powerful rhetoric, symbols, and images to gain awareness and interest about a social problem. Without establishing noise and raising concern, many acts or issues raised by claims-makers are simply ignored. To be able to gain attention on a national platform, the social problem must generate support from key stakeholders such as governmental agencies and special interest groups because these people have invested interests in the problem.

The second stage of the social construction process involves legitimatizing the rhetoric and noise about the deviant conduct that causes a response by official agencies (Spector & Kitsuse, 1975). Claims-making groups utilize numerous methods to legitimatize their claims about deviant conduct to foster support and public perceptions. These methods include presenting prevalence and incident rates, displaying growth claims, stating the claims affect everyone in the social spectrum, drawing connections between the behavior and associated evils, declaring the current policies and resources are inadequate in resolving the issue, and selling the behavior as a priceless commodity (Best, 1987). This is a significant step for claims-makers as this is an effective form of persuasion and showcases social consensus exists (Gusfield, 1989). The information from growth claims, prevalence estimates, and social spectrum claims (Best, 1987) are employed as the primary resources to the media to generate more support about the claim. Social problems that display drama and political biases compete in the larger public arenas (Hilgartner & Bosk, 1988). To accomplish this, claims-makers must utilize persuasive images, language, and symbols while continuing to revitalize new methods to remain important in the public eye. As highlighted above in the first stage, examples of social problems that utilize

these methods are the missing children problem, sex trafficking, school shootings, and drunk driving.

Prevalence rates provide the estimated number of cases, incidents, and people who are affected by the problem by using exaggerated or distorted statistics and figures. Best (1988) states groups use big numbers, and official statistics and numbers are the ideal to foster perceptions the social problem is large. Growth claims incite further fear or panic by describing how the problem is getting worse or the problem will continue to escalate if no action is taken immediately. Many claims-makers use rhetoric to describe the range of how far and who can be affected by the problem because it has endless boundaries (Best, 1987). Both growth and social spectrum claims use illustrations or images to sell the idea that everyone is affected. Another method claims-makers use to sell their interests in act or behavior is by slapping on a "priceless" or "most valuable asset" label. Additionally, many groups focus on highlighting the devastating experiences of innocent victims or effects felt by family members. Sometimes claims-makers will correlate one social problem with another which leads to worse behavior. In most cases, claims-making groups are able to gain traction about the problem by emphasizing the current policies, laws, or resources fail to address the issue at hand. Finally, a problem that has historical context and resurfaces helps validate why new practices are necessary (Best, 1987). Claims-making groups using these strategies are more likely to raise public awareness to help eliminate the problem.

Another important concept to help legitimatization process is to gain additional recognition and support from other groups. This helps to keep the problem in the public eye allowing the claims-makers to manage and control the rhetoric surrounding the problem. Public institutions or agencies with larger carrying capacities are going to bring more attention to the

problem as well as competition to remain a part of the public agenda (Hilgartner & Bosk, 1988). Sometimes this results in the problem being overtaken by a powerful group than the original complaining group (Spector & Kitsuse, 1973). Furthermore, as more agencies start to become involved in the process it aids in bringing more awareness to the problem leading to official measures such as congressional hearings. With the additional recognition, the rate prestige increases for these groups allowing them to become a spokesperson for the social problem. This requires the claims-makers to produce the documentation such as prevalence rates, big numbers, growth and social spectrum statements to further press their claims (Spector & Kitsuse, 1973).

At this second stage of the social construction process is where many social problems either thrive or disappear due to the efforts made by claims-making groups. For claims to flourish, it is important that a detailed plan is constructed to handle the influx of questions along with the execution of upcoming action items. This requires increasing budgetary funds to hire more staff, deal with complaints, and bring more attention to the claim. The second stage of the social construction is only complete when claims-makers can gather enough support and interest in the problem so that further action is warranted.

Without legitimatizing their claims, special interest groups and governmental agencies lose support as well as the power to make improvements. As seen by the above examples, there are wide range of methods being implemented to achieve the legitimization of social problems. It is important to understand the strategies employed to foster public perceptions and which produce the most effective results. Claims-making groups that only utilize one technique may not bring much awareness to their problem whereas, the utilization of numerous techniques is more likely to create more attention to the social problem.

The final stage of the social construction process involves the development of new policies due to the growing concerns about the inadequate resources currently aimed at addressing the social problem. According to Spector and Kitsuse (1973), the dissatisfaction of current established policies and procedures of the social problem will continue until improvements are complete. Complaints and distrust of current strategies fuel the lack of confidence in the current agencies' response to the social problem (Spector & Kitsuse, 1973). In addition, current strategies may have intended to resolve the problem, but are in fact are unsuitable to handle all the required demands. Other strategies may just a public image tactic to help let the problem fizzle out by creating a committee, increasing communication about the issue, and coming up with new solutions that will never be implemented (Spector & Kitsuse, 1973). As a result, the focus of the social problem becomes about the highlighting inefficiencies of current of resolutions rather than just publicizing the social problem as in the first stage. With this transition, it causes claims-makers to reorganize the approach to the social problem which is on eliminating current policies.

Rather than reeling in the negativity, claims-makers shift their focus on creating alternative strategies. For this step to be successful, claims-makers must overcome obstacles to legitimatize their claims and promote their agenda to fix the problem. Overall, claims-makers ultimate goal is to eliminate the social problem by bringing awareness and calling for action (Best, 1987). This requires organization to challenge the validity of institutions to establish modifications to current laws that have fallen on deaf ears. Therefore, claims-makers have be the driving force behind generating change and creating alternative solutions (Spector & Kitsuse, 1973). If this fails to occur, then the only option becomes establishing replacement institutions to create resolutions to the social problem. However, this plan may need to overcome many

obstacles to yield any positive outcomes. Even with success, there is still a possibility that any solutions implemented can be reversed by powerful social institutions (Spector & Ktisuse, 1973).

Claims-makers who can obtain monetary funding are going to have more success in allocating resources towards prevention and research. Social control is the main emphasis of the newly developed policies to correct the problematic behavior (Best, 1987). It is important to involve key players from the three branches of government (executive, legislative, judicial) so that changes can be executed. Consensus amongst claims-making groups is necessary to generate attention to the issue (Gusfield, 1981) and allows these groups to speak in public arenas such as government forums, meetings, conferences, and hearings (Hilgartner & Bosk, 1988). The carrying capacity of these public institutions are what determine if the social problems yield significant interest. An arena that has a smaller carrying capacity will require an intense competition amongst groups especially when it comes to constructing policies (Hilgartner & Bosk, 1988).

An example where policies became the focal point of eliminating a social problem was with the missing child phenomenon. Some of the political strategies of missing children center around locating the children. For example, the ability to report a missing child to the National Crime Information Center so all the details are accessible nationwide along with starting local searches sooner than the required 24-hour waiting period (Best, 1987).

Without monetary funds, it would be difficult for many claims-making groups to lobby for changes to social problems. For instance, anti-porn and anti-trafficking advocates have received monetary funds and grants to help fight against tracking and prostitution as well as establishing faith-based programs to promote a conservative social agenda (Weitzer, 2007). In

2000, the Victims of Trafficking and Violence Protection Act was enacted to establish a new agency to combat and monitor trafficking.

Professional experts and special interest groups defend the need for better social control mechanisms for numerous social problems. The primary response is to eradicate the social problem through the development of new laws. In many cases, new policies initiatives must target numerous social institutions to effectively resolve social problems which is the approached utilized by the NIAAA (Chauncey, 1980). Claims-making vigorously stress the current resources are incapable of addressing a social problem especially in the case of alcohol or drug related issues. At risk populations is another area of concern for special interest groups because they are seen as vulnerable or dangerous by society, so it becomes imperative to ensure policies are constructed to address these issues.

Policy formulation allows claims-makers to influence legislation and outcomes of social problems. Gaining monetary funding is crucial to construct new programs, policy initiatives, and other social services necessary to eradicate the problem. Special interest agencies who have a large carry capacity are more likely to yield new legislation and modifications to current laws (Hilgartner & Bosk, 1988). It is argued without the construction of new policies; the social problem will continue to plague society or be forgotten about.

Drug Scares

Over the past several decades, there have been numerous panics surrounding drugs. Reinarman (1994) introduces these socially constructed responses as drug scares which include alcohol, opium, marijuana, cocaine, heroin, and now prescription medication. Drug policies are developed in response to the fear and concern with the hopes of eradicate the problem and lower use. Reinarman (1994) outlines seven item formula for drug scares: kernel of truth, media

magnification, political moral entrepreneurs, professional interest groups, history of conflict, connecting the behavior to bad people, and blaming drugs for a wide range of other social problems. When all these seven elements align together, Reinarman (1994) states that drug scares are scapegoats that is a social control mechanism utilized by powerful people. This is achieved by stating drug use is deviant, so laws are enacted in control those people who partake in this behavior. In this case, members from these groups are from the lower class or racial minorities.

There is a replacement cycle to drug scares within the U.S. because when a more dangerous and harmful drug arises it draws more attention until a new threat comes about. For example, the Prohibition Era banned alcohol use until the rise of opium. It is argued this pattern will continue in American for three reasons: the language used to describe the effects drugs have upon society spar a knee jerk reaction of fear and panic; the political environment is able to use these claims or narratives to highlight the negative effects of drugs in order to push the idea that drugs cause a loss of self-control; the push for new legislation or social control mechanisms to decrease this loss of self-control. However, this becomes difficult when American culture states people need to have self-control to be productive members of society, but with the large amount of mass consumption people are going to lose self-control at times (Reinarman, 1994). It is this conflict that allows the reemergence of drug scares with in American society.

The drug scare framework highlights the connection between the claims-making efforts by powerful moral entrepreneurs to demonize groups who threaten societal norms and values by using drugs. Furthermore, the social construction cycle of drug problems arises because of antidrug lobbyists, groups, or media who identify and condemn a new drug by drawing attention and ordering for regulation (Boyd, 2010). Murakawa (2011) states drug scares in the U.S. are

going to linger because the crises or epidemics are socially created rather than discovered. Until the formula for drug scares are disrupted, powerful groups are going to continue to exert law enforcement efforts against lower class and minority groups (Reinarman, 1994). The current opioid epidemic seems to be the next American drug scare.

Current Study

With the rapid rise in opioid overdoses and deaths across the country, it is important to explore why there has been a heightened social response to the opioid epidemic. Current literature only discusses media representations of opioid and heroin use with some highlighting the discrepancies in media reporting on drug use among racial groups. Even though current research utilizes the social construction perspective, little is known about how claims-makers are able to initially draw attention to the opioid epidemic, define it as a social problem, and gain support for change. With the gap in the literature, the present study helps to fill the void by investigating the role of claims-makers have in the social construction of the opioid crisis. More specifically, this study outlines how claims-makers define opioids as a social problem, the methods claims-making groups utilize to legitimatize their claims, and the formation of policies directed a resolving the opioid problem.

Claims-making groups use rhetoric, symbols, and language to broadcast their agenda to shape public perceptions about the opioid epidemic. Furthermore, the legitimization tactics broaden the support of this social problem and leads to policy implementation that involves policy initiatives aimed at improving social control, prevention, and awareness (Best, 1987; Sacco, 1995). In conclusion, the social construction framework provides a better understanding of the opioid crisis by examining the role of claims-making specifically. This study adds to the research literature by learning more about the groups who have stake in making claims that

opioids are at epidemic levels and their influence on the construction of this crisis as America's next social problem. The present study explores how claims-making groups contribute to the social construction of the opioid epidemic by asking the following questions:

RQ 1: What role did claims-making groups have in the social construction of the opioid epidemic?

RQ 2: How frequent are claims-making groups generating attention and allocating resources towards the opioid epidemic?

RQ 3: What are the proposed resolutions or changes claims-makers plan to implement to address the opioid crisis?

CHAPTER 3. METHODS

This chapter outlines the mixed methodological approach to investigating the social construction of the opioid crisis. The goal is to provide a longitudinal snapshot of how the epidemic is framed by claims-making groups. The qualitative and quantitative data collection and analysis will be described separately.

Qualitative Data

To examine the social construction of the opioid epidemic, this study employed a mixed method approach. First, it is important to assess how the opioid problem is defined and formulated by claims-making groups. Second, if the problem is going to remain a focal point as a social problem, it is necessary to identify the methods and resources claims-makers utilize to legitimatize the problem. Finally, the use of quantitative statistics will highlight how claims-making groups aim to resolve the opioid problem.

The first step in the data collection process included identifying the key claims-making groups who have stake in the opioid crisis. These organizations include moral entrepreneurs (Becker, 1963), governmental agencies, special interest groups, advocate groups, corporations, and professional organizations (Spector & Kitsuse, 1975; Schneider, 1985). Claims-makers have a vested interest in defining opioids as a social problem because of the monetary and publicity benefits. To generate a list of claims-making groups, a Google search was conducted using two keyword phrases: opioid(s) and opioid epidemic. A review of the webpages produced from the search results allowed the creation of a list of federal agencies and professional associations who have verbally displayed a vested interest in the opioid crisis. The availability and usability of the internet has grown exponentially allowing easier access (Hayes-Smith & Hayes-Smith, 2009) to these groups' websites. Criminal Justice qualitative researchers have started to utilize websites as

a source of data (Holt, 2010). The internet aided in the identification of the agencies, special interest groups, and professional associations who were making the most noise, by drawing attention and raising concern, about the opioid epidemic. While reviewing the websites of federal agencies and professional associations for information lead to the compilation of special interest and advocacy groups who voiced concern about the rise in opioid overdoses and deaths. The groups chosen for inclusion in the study are nationally-recognized agencies, organizations, or professional interest groups (Reinarman, 1994) that are known to participate in similar social problem campaigns. Many of these claims-making groups were showing up or being cited in numerous website pages during the initial search for groups. Furthermore, several of claims-makers selected for the study were proposing legislative changes to address the crisis along with allocating funds towards research and prevention. It was important to choose claims-makings groups from an array of expert fields to represent the diverse perspectives on the topic of opioids. These results generated forty-three groups that include groups from wide range of disciplines such as pharmaceutical, medical, law, and public health. Table 1 displays the entire list of claims-makers.

Table 1

List of Claims-making Groups

Claims-making Group	Category
American Medical Association (AMA)	Special Interest Group
Centers for Disease Control (CDC)	Governmental Agency
Centers for Medicare & Medicaid (CMS)	Governmental Agency
Drug Enforcement Agency (DEA)	Governmental Agency
Department of Justice (DOJ)	Governmental Agency
Federal Drug Administration (FDA)	Governmental Agency
Health & Human Services (HHS)	Governmental Agency
National Community Pharmacists Association (NCPA)	Special Interest Group
National Institute on Drug Abuse (NIDA)	Governmental Agency
Substance Abuse and Mental Health Services Administration (SAMHSA)	Governmental Agency
American Academy of Family Physicians (AAFP)	Special Interest Group
American Academy of Pain Medicine (AAPM)	Special Interest Group
American Association of Retired Persons (AARP)	Special Interest Group
American Dental Association (ADA)	Special Interest Group
Allergan plc	Professional Organization
American Legion	Special Interest Group
American Osteopathic Academy of Addiction Medicine (AOAAM)	Special Interest Group
American Society of Addiction Medicine (ASAM)	Special Interest Group
Community Anti-Drug Coalitions of America (CADCA)	Special Interest Group
CVS Pharmacy (CVS)	Professional Organization
Drug Free America Foundation	Special Interest Group
Insys Therapeutics	Professional Organization
Johnson & Johnson (Janssen Pharmaceutical)	Professional Organization
Mallinckrodt Pharmaceuticals	Professional Organization
NAADAC - the Association for Addiction Professionals (NAADAC)	Special Interest Group
National Association of Boards of Pharmacies (NABP)	Special Interest Group
National Institute on Alcohol Abuse and Alcoholism (NIAAA)	Special Interest Group
National Institute of Health (NIH)	Governmental Agency
Office of National Drug Control Policy (ONDCP)	Governmental Agency
Partnership Drug Free America	Special Interest Group
Pfizer	Professional Organization
Purdue Pharmaceutical	Professional Organization
Teva Pharmaceutical Industries	Professional Organization
Department of Veteran Affairs (VA)	Governmental Agency
Walgreens	Professional Organization
World Health Organization (WHO)	Governmental Agency
Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF)	Governmental Agency
American Pharmacists Association (APA)	Special Interest Group
Wounded Warrior Project	Special Interest Group
American Veterans Committee	Special Interest Group
Community Anti-Drug Coalition	Special Interest Group
Endo International plc	Professional Organization

The primary source of data for this study includes articles and webpage content about opioids from a search of websites, pressrooms, and newsrooms of claims-making groups from

2010-2016. The study uses this six-year timeframe to gain a better understanding of why and when opioids became a problem. In 2010, the Federal Drug Administration (FDA) approved the newly formulated abuse-deterrent OxyContin produced Purdue Pharmaceutical that would reduce misuse and abuse (Purdue, 2010; Burke, 2011). This allowed the FDA to implement strict regulations on the formulation of new opioid prescription medication. Despite the implementation of the new guidelines, the Centers for Disease Control (CDC) and U.S. Surgeon General came out and stated that opioids had reached epidemic levels in late 2016 (CDC; 20616; HHS, 2016; Murthy, 2016). These two dates allow a comparison of how claims-makers describe the opioid problem after the FDA implemented abuse deterrent guidelines up to when the CDC made the opioid announcement.

Data was collected using a keyword search of each claims-making groups' website including the following keywords: opioid, fentanyl, heroin, synthetic opioid, and opioid epidemic. An opioid is a drug made from the opium poppy plant that includes, heroin, synthetic opioids such as fentanyl and prescription pain relievers (NIDA, 2018). Heroin is a derivative of morphine, which is a natural substance made from the seed pod of an opium poppy plant (NIDA, 2018). Fentanyl is a synthetic opioid, schedule II prescription drug, that is more than fifty to hundred times more potent than morphine (NIDA, 2018). Synthetic opioids are chemically formulated in laboratories to have similar effects as natural opiates (NIDA, 2018). These keywords were utilized to incorporate terms that are relevant to the opioid epidemic and generate fruitful results that encompass all the content pertinent to the opioid epidemic found on each claims-making group's webpage. After each keyword search, a review of each article, webpage, informational sheet, or any piece of information related to the search terms was conducted. If the keyword search was unsuccessful, the next stage was to search the website thoroughly to find

any information relevant on opioids, heroin, fentanyl, and the epidemic. In some instances, this led to the collection of additional information. Any information or statements relevant to the claims-making process such as problem formulation, legitimization of the claims, and policy development, were considered for inclusion in the study data.

To meet the standards for inclusion, data must pertain to information or statements about the rhetoric, symbols, or images of the opioid crisis. The social construction theory states that claims-makers will use words such as plague, crisis, epidemic, and other words used to persuade the public (Best, 1987). These words may include personal horror stories, disproportionate statistical figures, growth claims, and attention-grabbing slogans. Symbols may display statistical graphs that reference mortality or overdose rates, images of prescription pills or heroin with a syringe, and the act of using drugs which is a behavior threatening societal norms.

Next, data was collected on information relating to the legitimatization strategies or methods used by claims-makers to persuade (Gusfield, 1981) the public that the opioid crisis is an ongoing problem to foster societal support. The legitimization categories include the following: growth and social spectrum claims, prevalence estimates, associated evils links, and inefficiencies of current policies. Social spectrum claims include phrases or sentences indicating the opioid crisis affects people from different ethnic backgrounds, races, and socioeconomic statuses. Associated evil links suggest those who use heroin or opioid are likely participate in more violent or antisocial behavior. Claims-making groups identify and state the inadequacies of current opioid policies by highlighting the number of deaths, overdoses, and other failures.

Finally, any information pertaining to current or newly developed policies, laws, or strategies aimed at resolving the problem was gathered. This included making reference to

outlining monetary funds towards upcoming strategies or projects aimed in addressing the opioid crisis.

Once all the applicable data was collected, each article or piece of information was examined for inclusion in the dataset. The next step was to review each article to determine if there were any duplicates within the dataset. A criterion was developed to identify any articles not relevant to the purpose of the study. Articles were excluded for the following reasons:

First, the article, webpage, informational sheet, or any other piece of information article was not about the opioid epidemic. If article did not discuss the topic, it was automatically discarded from the data.

Second, the article only discussed a newly formulated opioid prescription medication or drug. Several claims-making groups were part of the pharmaceutical and medical professions, so it is not uncommon to see many articles, press releases, or informational sheets discussing new opioid drugs and their benefits. Many of these articles discussed opioid related drugs, however; this topic is not pertinent to the study, so it is inappropriate to include them in the study.

Third, articles that only alludes to a keyword term without making reference to the crisis. Numerous articles contained the keywords (fentanyl, heroin, opioid, synthetic opioid), but does not address the epidemic in any manner. Since the purpose of the study was to examine the opioid crisis, articles incorporating only keyword terms were not necessary to include in the dataset.

Finally, if any article was a duplicate of another it was removed during the initial review. It was common to observe duplicate articles across claims-makers' websites especially when conducting searches of the same keyword terms.

The criterion for inclusion helped identify the articles, webpages, or informational sheets obtained from claims-making groups' websites that specifically addressed the opioid epidemic, opioids, fentanyl, heroin, and synthetic opioids. Data that was eliminated during the initial review stages did not contain any relevant information about the opioid epidemic utilizing the claims-making process. By removing all the unnecessary data, the study can explore how the opioid epidemic is defined, legitimatized, and reformed by claims-makers. The total number of articles from the initial keyword searches was not counted as the data was gathered from numerous searches on each claims-maker's website rather than a central search engine. A total of 336 articles were used for the study.

Quantitative Data

For claims-makers to bring awareness to the opioid problem, they must have power and resources to fund the resolution. It is important to investigate the amount of money these groups allocate towards opioid research and prevention. A two-phase procedure was utilized during the quantitative stage of the study to obtain details on the revenue, expenditures, and funds aimed at eliminating the epidemic. The first phase involved a Google or internet search for the 2010-2016 yearly fiscal budgets for each claims-making group. This data provides a longitudinal view of the appropriated funds directed at resolving the opioid epidemic. After reviewing numerous fiscal budgets, the following measures were collected from each budget:

The first measure is the yearly budget for each claims-making group. The total amount of money the agency or group requests or receives each calendar year was collected. In some cases, the amount is the total revenue and/or operating expenses for the calendar year. The amount was indicated in either millions or billions of dollars.

The second measure is opioid prevention and advocacy. The total amount of monetary funds the claims-making group spent towards opioid prevention and advocacy. Some of the strategies included improving access to treatment, diversion control, prescription monitoring programs, research and development of deterrent opioids, and other grants. The dollar amounts range from thousands to millions.

Opioid research funds and awards is the third measure gathered during this phase of data collection. Data for this variable was retrieved from either the claims-makers website or from the grants.gov website. The data outlines the money directed at various opioid research projects that may encompass prescription monitoring programs and overdose prevention methods. The total monies allotted towards opioid research range from thousands to millions of dollars. A culminative number of research grants and awards was collected to track how much money and resources are diverted into research-based prevention strategies.

Drug revenue is the fourth measure collected. Pharmaceutical companies produce billions of dollars in revenue in drug sales each year. It is important to assess how much money is generated from opioid sales because it reveals the quantity of prescription opioid production. The total amount of opioid revenue for each year along with the profits for specific opioid drugs was collected.

The final measure included lawsuits resulting from the effects of opioid prescription medication. Many families and patients sue pharmaceutical companies because of the deaths of loved ones or addictive effects of opioid drugs. Other lawsuits involve states or cities suing these companies because of false labels, illegal kick-backs, and false marketing strategies. The total amount of money of settlements and lawsuits was collected for each pharmaceutical company. The dollar amounts range from thousands to millions.

The second phase involved retrieving data related to lobbying of special interest groups, advocates, and professional organizations. Lobbying is another resource that claims-makers use to establish interest in a social problem and develop policies aimed to address the problem (Blau, Brough, & Thomas, 2013; Kaiser, 2012; de Figueiredo & Richter, 2014). Data was gathered from the Open Secrets website run by the Center for Responsive Politics that provide information on federal campaign contributions and lobbying efforts, as well as tracks money in politics. After reviewing the available lobbying data between 2010-2016, the following measures were collected for each agency: 1) total lobbying funds and 2) number of clients lobbying for agency.

It is important to establish how much money was being contributed each year by lobbying groups, so the first measure is the total lobbying funds. A total of all lobbying finances each agency received was collected for each calendar year. This income offers advocacy groups and professional agencies with additional resources to expand awareness, foster public perceptions, and petition new laws. The funds range from thousands to millions.

The next measure consisted of collecting data on the number of clients lobbying on behalf of agency. Knowing the quantity of people and organizations who make financial contributions towards a specific cause reveals who impacts modifications to political strategies. For each calendar year, the total number of clients lobbying on behalf of an agency was collected.

Qualitative Analysis

After all of the articles, webpages, informational sheets, or any other information pertaining to the opioid epidemic were gathered they were then organized by year and agency. By sorting and organizing the articles in this manner produced a more accurate picture of how

each claims-making group frame the opioid epidemic and the frequency of articles dedicated to this subject.

Next, the qualitative analysis consists of content analysis as the primary analytic tool to examine rhetorical claims or symbols and legitimization strategies used by claims-making groups. Content analysis is a qualitative and quantitative technique that allows researchers to critically analyze rhetoric, texts, and language set forth by the media or other types of messengers (Neundorf, 2002; Berg, 2007). Content analysis is gaining popularity among scholars from an array of disciplines (Neundorf, 2002; Riffe & Freitag, 1997). Research shows that content analysis process can be a systematic and reliable methodological approach (Berg, 2007; Schreier, 2012). Typically, content analysis examines media messages, but scholars are now utilizing the methodological strategy to evaluate other forms of textual data (Holt, 2010; Berg, 2007). Qualitative content analysis helps to identify patterns, themes, and categories so researchers can interpret the context (Altheide & Schneider, 2013).

The content analysis involved examining articles, press releases, informational sheets, and webpages to identify key themes and categories. The initial review of each press release, article, informational sheet, or webpage was coded into one of the following themes: 1) problem formulation, 2) legitimization of the problem, and 3) policy formulation and development. These themes represent the three steps in the claims-making process. In addition, the initial review helped with the identification of reoccurring categories:

1) the rhetoric, symbols, and images claims-makers use to define the opioid epidemic as a social problem;

2) the legitimatization methods to boost the awareness and support of the opioid crisis which consisted one of the following: growth and social spectrum claims, prevalence estimates, associated evils links, and inefficiencies of current policies;
3) the construction or development of new policy initiatives or laws to resolve the opioid.

These categories reflect the specific techniques utilized by claims-makers to justify their claims and actions about the opioid epidemic. During the second review, notes were made to validate the reoccurring themes and categories from a which a code book was developed (Appendix A). Next, each text piece was read again, and coders decided whether individual sentences can fit into the three themes and one of several categories. The process of coding full sentences, rather than words or paragraphs, provides a clear meaning to the context (Berg, 2007).

To check intercoder reliability, approximately ten percent of the articles, 36, were selected randomly by a non-coder. Two independent coders were given the codebook and asked to code the sample. Next, the coders met to review each article and count the number of times the codes agreed and disagreed. A percent agreement (Lombard, Bracken, & Snyder-Dutch, 2004) was calculated by taking the number of agreements divided by the number of disagreements plus agreements multiplied by 100 (Neuendorf, 2002). The averaged percent agreement came to 70% then the articles were recoded until 100% percent agreement was reached (Zaleski, Gunderson, Baes, Estupinian, & Vergara, 2016).

Quantitative Analysis

The quantitative data analysis portion of this study contains mostly descriptive statistics such as frequencies and yearly trends. Descriptive statistics seek to describe the data rather than making inferences about the entire population (Sirkin, 2006). Numerous academic disciplines

utilize descriptive statistics for a large amount of data and when no inferential statistical techniques are necessary (Sirkin, 2006). Most of the quantitative data contains budgetary numbers that only required simple descriptive analysis.

The first step in the analysis involved frequency counts of the articles, press releases, informational sheets, and webpages for each claims-making group. This was followed by frequency of rhetorical content by group and year. Next, the fiscal budget data was employed to examine the spending trends of claims-makers. For this study, the money claim-makers allocate towards opioid prevention and research was assessed in numerous formats.

First, the quantitative data was analyzed for each claims-making group between 2010-2016 for each budget category. These budget categories include; yearly budget, opioid prevention and advocacy, opioid research and awards, drug revenue, and lawsuits. However, some categories may not applicable to all groups. Here are a few reasons: no data was found for these categories in the fiscal budget, no fiscal budget was available, the claims-makers did not report this data or does not allocate monetary funds towards a specific category.

Second, each quantitative measure was examined by year to understand how the monetary amounts have changed over time. Next, each claims-making group was assigned to one of the following three categories: governmental agencies, special interest groups, and professional organizations. After each group is assigned to a category, comparisons were made between the categories and each measure to determine which category contributed resources towards addressing the opioid epidemic.

The second step of the quantitative data analysis involved investigating the lobbying information which included the total lobbying funds and number of clients lobbying on behalf of an agency. Again, the data was analyzed for each claims-making group and the three categorizes.

This information revealed what kinds of additional resources claims-making groups have to generate awareness, maintain power, and eliminate the opioid problem.

CHAPTER 4. FINDINGS

This chapter outlines the results pertaining to the social construction of the opioid epidemic by presenting data on the role claims-making groups have in the social construction process, the frequency of the rhetorical content about the opioid crisis, the monetary resources allocated to resolutions, and the proposed policies and solutions to end the epidemic. The data, qualitative and quantitative, presented in this chapter will provide a clear picture about how claims-making groups have contributed to the social construction of the opioid epidemic.

Sample Description

After conducting searches of all forty-three claims-making groups' websites for content pertaining to keywords from 2010-2016, it resulted in 336 pieces or articles of information to be reviewed. Each article, press release, information sheet, or website content was qualitatively analyzed to identify rhetorical themes and categories regarding the social construction components. The completion of the qualitative analysis resulted in 1,423 sentences meeting the requirements of rhetorical themes or categories relating to the social construction of the opioid epidemic. Fiscal data was collected from financial or revenue records for each claims-making group. Additionally, data on research and grant funding was collected for each group. But, some groups financial records were not publicly available.

Research Q1: Role of Claims-making Groups

Claims-making groups set the precedent about a social problem by utilizing the social construction process. In this case, the opioid epidemic is America's next social problem because claims-makers have successfully accomplished defining opioids as a problem, legitimatized their claims through the use of statistics and symbols, and proposed resolution strategies to reduce opioid misuse, abuse, and death rates. Without adhering to the social construction perspective, it

makes it difficult for claims-makers to gain and maintain the necessary attention on the opioid crisis (Becker, 1963; Best, 1987) so it is imperative to establish their role within the process early on.

The role claims-making groups have in the social construction process is vital to the existence of the problem. Claims-makers who initiate the social construction process early on are going to direct and drive the narrative regarding the problem (Best, 1987). The first step in establishing their role is to define the opioid epidemic as a social problem by presenting rhetoric or images that highlight opioids as a dangerous drug that has contributed to high rates of overdose and death. Another way these groups perpetuate content about opioids is by stating it is a crisis or epidemic, displaying highly inflated statistical data, and sharing personal horror stories about the negative impacts opioids have had on individuals, families, and the country (Best, 1987). By using certain key words, phrases, or slogans, it allows these groups to bring awareness and foster public perceptions about the opioid epidemic. Claims-makers incorporating persuasive and attention-grabbing rhetoric on the opioid epidemic are going to benefit more than groups who do not because they are able to control and influence the narrative. Problem formulation is the rhetorical theme that aligned with the first step of the social construction process. Rhetoric serves as the main category under this theme because this is the primary method claims-makers use to define the opioid issue (Spector & Kitsuse, 1975; Best, 1987).

Qualitative examples of problem formulation:

- *Opioid use disorder has reached epidemic levels in the United States. Since 1990, there has been exponential growth in opioid-related hospitalizations, overdoses, and deaths. (ASAM, 2014)*

- *The nation is facing an opioid crisis, with overdose deaths attributable to these drugs nearly quadrupling since 1999 and the number of prescription opioids dispensed also quadrupling over the same time frame. It is now known that this startling increase in opioid overdose deaths was driven, in large part, by overdoses from prescription opioid pain relievers (Partnership for Drug Free America, 2016)*
- *2015 National Drug Threat Assessment (NDTA), which found that drug overdose deaths are the leading cause of injury death in the United States, ahead of deaths from motor vehicle accidents and firearms. (DEA, 2015; FDA, 2016, HHS, 2016; SAMHSA, 2016; ONDCP, 2016; Walgreens, 2016)*
- *"Every day, 44 people die in American communities from an overdose of prescription opioids and many more become addicted, (CDC, 2015; NAADAC, 2010; HHS, 2016; NIDA, 2015; AAFP, 2015; ADA, 2015; ASAM, 2015; CVS, 2016; AMA, 2015)*
- *Prescription drug abuse is our Nation's fastest-growing drug problem. The number of people who have unintentionally overdosed on prescription drugs now exceeds the number who overdosed during the crack cocaine epidemic of the 1980's and the black tar heroin epidemic of the 1970's combined. (ONDCP, 2011)*
- *Every day, I hear from another parent who has tragically lost a son or daughter to an opioid overdose. No words can lessen their pain. (ONCP, 2014)*

Using legitimatization strategies or methods is the second way claims-making groups establish their position in the social construction of the opioid epidemic. This is achieved by presenting prevalence rates, discussing growth or social spectrum claims, linking opioid use with other evil behaviors, and highlighting inadequacies of current policies or practices (Best, 1987). Successful groups are going to incorporate all of these methods to impact the rhetorical content

about the significant rises in the rates of opioid use and abuse. This allows the claims-makers to grab and maintain recognition of this subject. Furthermore, legitimatization techniques also foster more public support to fix the problem and prevent further harm. Many times, claims-makers will utilize their legitimatization methods to not only enhance the narrative about the opioid epidemic, but also instill fear and panic. Showcasing claims through rates, evil associations, and inefficiencies is an important role claims-makers must utilize frequently. Legitimatization of claims is the second rhetorical theme which consists of the following categories: prevalence rates, growth claims, social spectrum claims, associated evil links, and inefficient policies.

Qualitative examples of legitimatization of claims:

Prevalence rates:

- *The numbers are shocking-approximately 46,000 Americans die each year from drug-related deaths. More than half of those are from heroin and prescription opioids. (DEA, 2015)*
- *According to SAMHSA, nearly two million Americans abused or were dependent on prescription opioids in 2014. (SAMHSA, 2014; FDA, 2014, CADCA, 2016)*
- *The number of prescriptions filled for opioid pain relievers has increased dramatically in recent years. From 1997 to 2007, the milligram per person use of prescription opioids in the U.S. increased from 74 milligrams to 369 milligrams, an increase of 402 percent. In 2000, retail pharmacies dispensed 174 million prescriptions for opioids; by 2009, 257 million prescriptions were dispensed, an increase of 48 percent. Further, opiate overdoses, once almost always due to heroin use, are now increasingly due to abuse of prescription painkillers. (ONDCP, 2012)*

- *Taken together, 19,885 Americans lost their lives in 2015 to deaths involving primarily illicit opioids: heroin, synthetic opioids other than methadone (e.g., fentanyl), or a mixture of the two. (ONDCP, 2016)*
- *Non-medical use of opioid pain relievers cost US health insurers approximately $55 billion annually. (ASAM, 2014)*
- *Almost half a million people lost their lives to drugs overdoses from 2000 to 2014. This startling increase in opioid overdose deaths was driven in large part, by overdoses from prescription pain relievers. (Partnership for Drug Free America, 2016, CDC, 2016)*
- *A new report by the Substance Abuse and Mental Health Services Administration (SAMHSA) shows that people aged 12 to 49 who had used prescription pain relievers nonmedically were 19 times more likely to have initiated heroin use recently (within the past 12 months of being interviewed) than others in that age group (0.39 percent versus 0.02 percent). The report also shows that four out of five recent heroin initiates (79.5 percent) had previously used prescription pain relievers nonmedically. (SAMHSA, 2014)*

Growth claims:

- *Heroin overdoses have increased 244% between 2007 and 2013. Many of the new heroin users are youths, with an average age of 24 ½ years old for first-time users. (DOJ, 2016)*
- *From 1999 to 2008, overdose death rates, sales and substance use disorder treatment admissions related to prescription pain relievers increased in parallel. The overdose death rate in 2008 was nearly four times the 1999 rate; sales of prescription pain relievers in 2010 were four times those in 1999; and the substance use disorder treatment admission rate in 2009 was six times the 1999 rate. From 1998 to 2008, the number of*

people being treated for opioid abuse increased 400 percent. (ASAM, 2016; AARP 2016; VA, 2014)

- *The CDC's National Center for Health Statistics reports that between 2000 and 2013 the age-adjusted rate for overdose deaths involving heroin nearly quadrupled, rising from 0.7 deaths per 100,000 Americans in 2000 to 2.7 deaths per 100,000 in 2012. During that time, the country experienced a 37% per year increase in heroin deaths. (CADCA, 2015)*
- *Deaths from prescription painkiller overdoses among women have increased more than 400% since 1999, compared to 265% among men. (CDC, 2013)*
- *The number of opioid prescriptions written each year has quadrupled in less than two decades, yet pain reported by Americans has not changed during that time period. Now, after two decades of increasing prescriptions, there are nearly two million Americans in the United States with opioid use disorder. The Medicare population has among the highest and fastest-growing rates of opioid use disorder, currently at more than 6 of every 1,000 beneficiaries. For Medicaid beneficiaries, the prevalence of diagnosed opioid use disorder is even higher, at 8.7 per 1,000, a figure which is estimated to be over 10 times higher than in populations who have private insurance coverage. (CMS, 2016)*

Social Spectrum claims:

- *Prescription opioid use varies according to age, gender, and ethnicity. (CDC, 2016)*
- *Heroin use has increased across the US among men and women, most age groups, and all income levels. Some of the greatest increases occurred in demographic groups with historically low rates of heroin use: women, the privately insured, and people with higher incomes. (CDC, 2016)*

- *The misuse of opioids – a class of drug that includes prescription painkillers and heroin – has devastated families and towns across the Nation. (ONDCP, 2014))*
- *The racial and ethnic background of people dying from heroin overdose also has shifted. African Americans 45-64 were the group most likely to die from a heroin overdose in 2000. Today, Caucasians age 1-44 have the highest rate from heroin abuse said the CDC. Study found that men were nearly four times as likely women to die from a heroin overdose and that users in the Midwest increased exponentially. (CADCA, 2015)*
- *Drug overdose deaths are up in both men and women, in non-Hispanic whites and blacks, and in adults of nearly all ages. Rates of drug overdose deaths were highest among five states: West Virginia, New Mexico, New Hampshire, Kentucky, and Ohio. A map of drug overdose deaths by state (2013 and 2014). (CDC, 2015)*

Associate evil links:

- *Heroin is a highly addictive opioid drug that is illegal and has no accepted medical use in the U.S. Its use can result in a wide variety of health risks including exposure to infectious diseases such as Hepatitis C and HIV/AIDS (if taken through infected needles) and potentially fatal overdoses. (SAMHSA, 2015)*
- *"At the same time, we've seen a dramatic rise in the use of heroin. In fact, four in five new heroin users started out by misusing prescription drugs; then they switched to heroin. So this really is a President Obama at the Podium gateway drug. As a consequence, between 2002 and 2013, the number of heroin-related deaths in America nearly quadrupled, although the number of heroin-related overdoses is still far exceeded by the number of legal prescription drug overdoses." (ASAM, 2015)*

- *Stealing additional medication nor falsifying prescriptions to obtain additional medication has become more common. However, instances of individuals turning to illegal drugs like heroin because it can provide the same sort of relief in a much more intense and dangerous fashion, has also become prevalent among all generations. (AARP, 2016)*
- *But that can be tough recovering addicts. "Oxycodone is heroin in a pill," "It set off the craving, and I was back on heroin in, like, a minute." (AARP, 2011)*
- *A crackdown on prescription opiates has driven up the price for drugs such as OxyContin and Percocet, enticing addicts to switch to cheap heroin and other illicit alternatives to fend off withdrawal symptoms (CADCA, 2015)*

Inefficient polices:

- *Physicians receive little training about pain management or addiction treatment in medical school or in residency programs. As a result, there is a general lack of understanding and experience among most physicians related to these diseases. This lack of education reinforces the prevailing modes of practice: prescription opioids for pain management and an antiquated view of addiction as an acute behavioral problem for which treatment is only self help or weeks of inpatient rehabilitation. It is the opinion of ASAM that a lack of education among most physicians about the proper treatment of chronic pain and chronic opioid addiction disease is a considerable contributing factor to the current opioid addiction epidemic. (ASAM, 2014)*
- *In addition, the statement said, arbitrary limits on the number of addiction patients who can be treated by a physician or the number and variety of therapies used by addiction medicine physicians should not be imposed by law or insurance practices. Currently,*

federal laws limit the number of opioid-dependent patients that physicians can treat with buprenorphine in an office-based setting. "There's no scientific basis for current limitations on addiction medications and specialist physicians who prescribe them," These limits, and the public stigmatization of addiction medications that they arouse, are costing the lives of patients who relapse and overdose. (ASAM, 2013)

- *More research is needed to see if current practices are working, with a closer look at why so many patients are getting multiple prescriptions within a short period of time, "As a nation, it is important that we all become better informed about effective pain management and the risks of abusing prescription painkillers." (NIH, 2011)*
- *The researchers suggest there are several reasons for this spread of opioid abuse in rural communities, including an increasing number of painkiller prescriptions written for adolescents, as well as the limited types of medical care available in rural areas. (CADCA, 2015)*
- *We know that the illegal diversion, misuse, and abuse of prescription opioids are often fueled by inappropriate prescribing, improper disposal of unused medications, and the illegal activity of a small number of health care providers. This highlights the important role that education of prescribers and patients can play in addressing this epidemic. The FDA has taken steps to address this, but more work remains to be done. (FDA, 2014)*

The final step in the social construction process is proposing resolution strategies and developing policy initiatives (Spector & Kitsuse, 1975). A call for action and successfully implementing resolution strategies is the main role for this final step. Claims-makers who recommend solutions early on are able to gain support for these ideas and other groups will soon follow. In most cases, only ideas are presented without a detailed execution plan and the money

required to fund these proposed initiatives. However, the ultimate goal is just to introduce resolutions to assemble support and bring awareness to the opioid epidemic. It is important to showcase how the suggested solutions reduce and prevent opioid use, abuse, and death. To remain at the forefront of the opioid crisis, claims-makers must ensure a vast array of opioid related topics are incorporated in new policy and resolution initiatives. Policy formulation and development is the third rhetorical theme that consists of two categories: resolution strategies and policy development.

Qualitative examples of policy formulation and development:

Resolution strategies:

- *The AMA recognizes the severity of this public health epidemic and is fully committed to being an active partner in implementing solutions to combat it. Our partnership with the administration will significantly advance our efforts currently underway to advance four key elements that we believe will have a significant impact. This includes increasing physician registration and use of prescription drug monitoring programs (PDMPs), enhancing education and training for physicians in safe prescribing practices, increasing access to naloxone to reduce deaths from overdose along with strong Good Samaritan protections, and improving patient access to treatment for substance use disorder by increasing the number of physicians who are certified to provide medication assisted treatment with buprenorphine. (AMA, 2015; HHS 2016)*
- *Steps that states can take to address the overprescribing of painkillers include: Considering ways to increase use of prescription drug monitoring programs, which are state-run databases that track prescriptions for painkillers and can help find problems in overprescribing. Impact of these programs is greater when they make data available in*

real time, are universal (used by all prescribers for all prescriptions for all controlled substances), and are actively managed (for example, send alerts to prescribers when problems are identified). Considering policy options, including laws and regulation, relating to pain clinics to reduce prescribing practices that are risky to patients. Evaluating their own data and programs and considering ways to assess their Medicaid, workers' compensation programs, and other state-run health plans to detect and address inappropriate prescribing of painkillers. Identifying opportunities to increase access to substance abuse treatment and considering expanding first responder access to naloxone, a drug used when people overdose. (CDC, 2014; DOJ, 2014; ASAM, 2016)

- *Since 2001 the FDA has taken a number of actions designed to help address prescription opioid abuse and to encourage the development of new drug treatments for pain. These actions include: Revising the labeling for opioid medications to foster their safe and appropriate use, including recent changes to the indications and safety warnings of extended-release and long-acting opioids. Requiring that manufacturers conduct studies of the safety of long-term use of prescription opioids. Improving appropriate prescribing by physicians and use by patients through educational materials required as a part of a risk mitigation strategy for extended-release and long-acting opioids. Using the agency's expedited review programs to advance development of new non-opioid medications to treat pain with the goal of bringing new non- or less-abusable products to market. Working with other federal agencies and scientists to advance our understanding of the mechanisms for pain and how to treat it, including the search for new non-opioid medications for pain. Recommending that hydrocodone-containing combination products have additional restrictions on their use by rescheduling them from Schedule III to*

Schedule II. Strengthening surveillance efforts to actively monitor the changing nature of prescription opioid abuse and to identify emerging issues. And, importantly, encouraging the development of medications to treat opioid abuse, such as buprenorphine for use in medication-assisted treatment, and to reverse opioid overdoses, such as naloxone. (FDA, 2014)

- *Today, the Office of National Drug Control Policy (ONDCP) and the National Institute on Drug Abuse (NIDA) launched a new online learning tool which will provide training for healthcare providers on proper prescribing and patient management practices for patients on opioid analgesics (painkillers). The launch of the tool builds upon previously announced Administration efforts to address the nation's prescription drug abuse epidemic through a balanced public health and safety approach and support the Administration's goal of reducing the misuse of prescription drug abuse by 15 percent by 2015. (NIDA, 2012; ONDCP, 2012)*
- *The Substance Abuse and Mental Health Services Administration (SAMHSA) today announced the availability of new funding to combat the prescription opioid and heroin crisis. The funds, made available through the State Targeted Response to the Opioid Crisis Grants, will provide up to $970 million to states and territories over the next two years, beginning in fiscal year 2017. This funding holds the promise of saving and restoring thousands of lives throughout our nation," "These grants will allow communities, particularly those most devastated by the opioid crisis, to provide services that can promote prevention and deliver treatment and recovery to people needing help." (SAMHSA, 2016)*

- *As announced last week, the budget includes $1.1 billion in new funding to address the prescription opioid abuse and heroin use epidemic. $1 billion in mandatory new funding is being requested to help people with an opioid use disorder seek treatment, successfully complete treatment, and sustain long-term recovery. A further $90 million is being requested to expand state-level prescription drug overdose prevention strategies, increase the availability of medication-assisted treatment programs, improve access to the overdose-reversal drug naloxone, and support targeted enforcement activities. (ONDCP, 2016)*

Policy development:

- *On Friday the U. S. Drug Enforcement (DEA) will publish in the Federal Register the Final Rule moving hydrocodone combination (HCPs) from Schedule III to the more-restrictive Schedule II, as recommended by the Assistant Secretary for Health of the U.S. Department of Health and Human (HHS) and as supported by the DEA's own evaluation of relevant data. (DEA, 2014)*
- *Senator (D-W.Va.) and five other Senators last week introduced legislation that would levy a 1-cent fee on every milligram of active opioid ingredient in each prescription pain medication sold. The money raised would be used to fund opioid addiction treatment. The bill. S. 2977, also includes a rebate program for cancer-related pain and hospice care, and exempts drugs used exclusively for the treatment of opioid addiction. (NCPA, 2016)*
- *Any one strategy alone will not enough to fully respond to the crisis of opioid abuse and overdoses, which is why CARA is so crucial to this effort. CARA establishes a comprehensive, coordinated, balanced approach through enhanced grant programs that include a mix of effective strategies across all of the pillars that are needed to reduce*

drug use, abuse, addiction, and overdose: prevention treatment, overdose rehearsal, recovery, support, and law enforcement/criminal justice reform. The bill includes four pillars - prevention, treatment, recovery, and law enforcement-necessary for a comprehensive approach to this major drug abuse problem and includes CADCA's recommended provision that provides for a community-based enhancement grant program for communities tackle their local prescription drug/heroin crises. (CADCA, 2016; AAFP, 2016; ADA, 2016; NAADAC, 2015)

- *The AMA supports efforts to confront the opioid and prescription drug epidemic through meaningful legislation so physicians who are on the front line have the ability to best meet patient needs," "This legislation represents an important step in addressing the public health epidemic of opioid misuse, but it will not be fully realized without new resources to support these programs and policies. We look forward to continuing to work with policymakers, advocates, physicians and other health care professionals on efforts to prevent addiction and provide treatment for those suffering from substance use disorders."(AMA, 2016)*
- *Four days after the first Take-Back event in September 2010, Congress passed the Secure and Responsible Drug Disposal Act of 2010, which amends the Controlled Substances Act to allow an "ultimate user" of controlled substance medications dispose of them by delivering them to entities authorized by the Attorney General to accept them. The Act also allows the Attorney General to authorize long term care facilities to dispose of their residents'-controlled substances in certain instances. DEA is in the process of drafting regulations to implement the Act. (DEA, 2011)*

Claims-makers have played an important role in the social construction of the opioid epidemic. Utilizing this perspective helps groups to raise awareness about how opioid abuse is rising exponentially, foster support through the legitimatization strategies, and propose resolution and prevention initiatives (Best, 1989, Spector & Kitsuse, 1975). Qualitative data above displays the various ways claims-making groups are successful at using rhetorical content to draw attention to the opioid epidemic. Those groups who follow this process are going to be effective at gaining national attention which gives them the platform to be heard, voice their concerns, and assert change.

Research Q2: Frequency of Social Construction Content

Since making noise is one of the primary strategies utilized by claims-makers to gain attention towards a problem (Best, 1987), it is necessary for numerous groups to frequently make statements or release information pertaining to the problem, so it receives national attention. Over the past several years, claims-making groups have started to raise awareness about the rise in opioid related deaths in United States. However, a real shift took place after the Centers for Disease Control (CDC) stated, in December 2016, that opioids had reached epidemic levels due to the significant rise in the number of opioid related deaths and overdoses. Prior to December 2016, only a few claims-making groups were making consistent noise about the presence of opioids along with outlining its devastating effects. Figure 1 displays the frequency of articles, press releases, website content, and other information pertaining to opioids, heroin, fentanyl, and the epidemic for each claims-making group. Findings show the amount of content on the opioid epidemic has increased from 2010-2016. Some claims-making groups were making noise about the opioid crisis earlier than others (Table 2). For example, the Office of National Drug Control Policy started to raise awareness about the rise of opioid misuse and abuse. Only seven (16%)

claims-making groups were discussing the opioid crisis in 2010 (3% of total content). Some other notable groups include: Centers for Disease Control (CDC), Substance Abuse and Mental Health Services Administration (SAMHSA), Drug Enforcement Agency (DEA), Department of Justice (DOJ), and Food and Drug Administration (FDA). Results show that the number of claims-making groups along with the frequency of content about the opioid epidemic increases slowly over the next two years then the amount of content decreases in 2013. By 2014, both the quantity of claims-making groups and content on the opioid epidemic doubled. Figure 1 shows 19 groups released 42 (12.5% of total content) articles pertaining to one of the following subjects: opioids, heroin, fentanyl, and the epidemic. These are some of the newly added groups making noise: Center for Medicare and Medicaid Service, American Society of Addiction Medicine, Pfizer, Purdue Pharmaceutical, Partnership for Drug Free America, and Department of Veteran Affairs. As more claims-makers are making noise about the opioid problem in the United States, it results in a growing list of additional groups who want to bring attention to this problem. Both the frequency of the content and number of claims-making groups again doubled in 2015. More specifically, 28 of the 43 claims-making groups (65%) had at least one or more articles related to the opioid crisis that year. Approximately 21% of all the rhetorical content about opioids, fentanyl, heroin, and the epidemic were released in 2015. After the CDC in December of 2016, followed by the U.S. Surgeon General, stated opioids had reached epidemic levels is when there was a significant increase in the amount of content and groups who were making statements about devastating effects of opioids which includes misuse, addiction, and death.

Only 13 of the 43 claims-making groups were not releasing any pertinent content related to the epidemic in 2016. Approximately 48% of the total content on the opioid epidemic was

released in 2016 compared to only 3% in 2010. Some of these groups included: Johnson & Johnson, Insys, Allergan, Pfizer, Endo Health, Community Anti-Drug Coalition, World Health Organization, Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF), and American Veterans Committee. The findings show since 2010 the number of claims-making groups and the amount of content involving discussions of opioids, heroin, fentanyl, and an epidemic increased gradually until 2012 then doubled each year thereafter. Without this escalation of rhetorical content made by numerous claims-making groups, it is likely that the opioid epidemic may not have received national interest. Therefore, not becoming America's next social problem. These results showcase the important role that claims-makers have in establishing rhetoric surrounding the social construction of the opioid epidemic.

Table 2

Frequency of Content on Opioid Epidemic by Claims-making Group and Year

Governmental Agencies	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**Total**
CDC	1	1	0	1	2	6	18	29
CMS	0	0	0	0	1	2	4	7
DEA	1	3	3	4	2	5	5	23
DOJ	1	0	0	0	3	0	4	8
FDA	1	0	1	3	2	2	6	15
HHS	0	0	0	0	0	2	8	10
NIH	0	2	1	0	0	0	1	4
ODNCP	7	5	8	1	7	7	10	45
SAMHSA	1	0	0	2	2	2	7	14
NIAAA	0	1	0	0	0	0	1	2
NIDA	0	1	2	1	2	1	2	9
VA	0	0	0	0	2	3	3	8
WHO	0	0	0	0	0	0	0	0
ATF	0	0	0	0	0	0	0	0
Total	12	13	15	12	23	30	69	174
Special Interest Groups	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**Total**
NCPA	0	0	0	0	0	1	4	5
AAFP	0	0	1	0	0	2	5	8
AAPM	0	0	2	0	1	1	1	5
AARP	0	2	0	0	1	2	2	7
ADA	0	0	1	0	0	4	9	14
American Legion	0	0	0	1	1	1	2	5
AOAAM	0	0	0	0	0	1	0	1
ASAM	0	0	0	2	7	5	5	19
CADCA	0	0	0	0	0	6	5	11
Drug Free America	0	0	0	0	0	0	2	2
NAADAC	1	0	0	0	0	1	1	3
NABP	0	0	1	1	4	2	0	8
NCPA	0	0	0	0	0	1	4	5
Partnership Drug Free America	0	0	1	1	1	2	13	18
AMA	*	*	*	*	*	5	11	16
APA	0	0	0	0	0	0	0	0
Wounded Warrior Project	0	0	0	0	0	0	0	0
American Veterans Committee	0	0	0	0	0	0	0	0
Community Anti-Drug Coalitions of America	0	0	0	0	0	0	0	0
Total	1	2	6	5	15	34	64	127
Professional Organizations	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**Total**
Allergan	0	0	0	0	0	0	0	0
CVS	0	0	0	0	0	1	6	7
Insys	0	0	0	0	0	1	0	1
Johnson & Johnson	0	1	0	0	0	0	0	1
Mallinckrodt	0	0	0	0	1	0	7	8
Pfizer	0	0	0	0	1	1	0	2
Purdue	0	0	0	0	1	3	6	10
Teva	0	0	0	0	1	0	3	4
Walgreens	0	0	0	0	0	0	3	3
Endo Health	0	0	0	0	0	0	0	0
Total	0	1	0	0	4	6	25	36
Overall Total	**13**	**16**	**21**	**17**	**42**	**70**	**157**	**336**

*Data unavailable

Results show, Figures 2-4, that particular claims-making groups started to formulate rhetoric about the opioids and the crisis earlier than others. Governmental agencies, such as the CDC, CMS, FDA, and ONDCP, were more consistent about the amount of content released about the opioid epidemic each year. More than 50% of the rhetorical content on the opioid epidemic was released by governmental agencies while 36% was released by special interest groups and 10% from professional organizations. Furthermore, several governmental agencies began distributing information in 2010 in comparison to the other two groups. Being at the forefront of the problem allowed the governmental agencies to shape the rhetorical content about the crisis. Many of the special interest groups and professional organizations would reference these agencies when presenting claims about opioids, fentanyl, heroin, and the epidemic. Finally, there are several agencies in each category who did not generate any rhetoric about the opioid crisis even though they would have stake in making such claims. Some include: World Health Organization, Endo Health, American Veterans Committee, Community Anti-Drug Coalitions of America, and Allergan. These findings highlight that some groups are leading the conversation on the opioid epidemic.

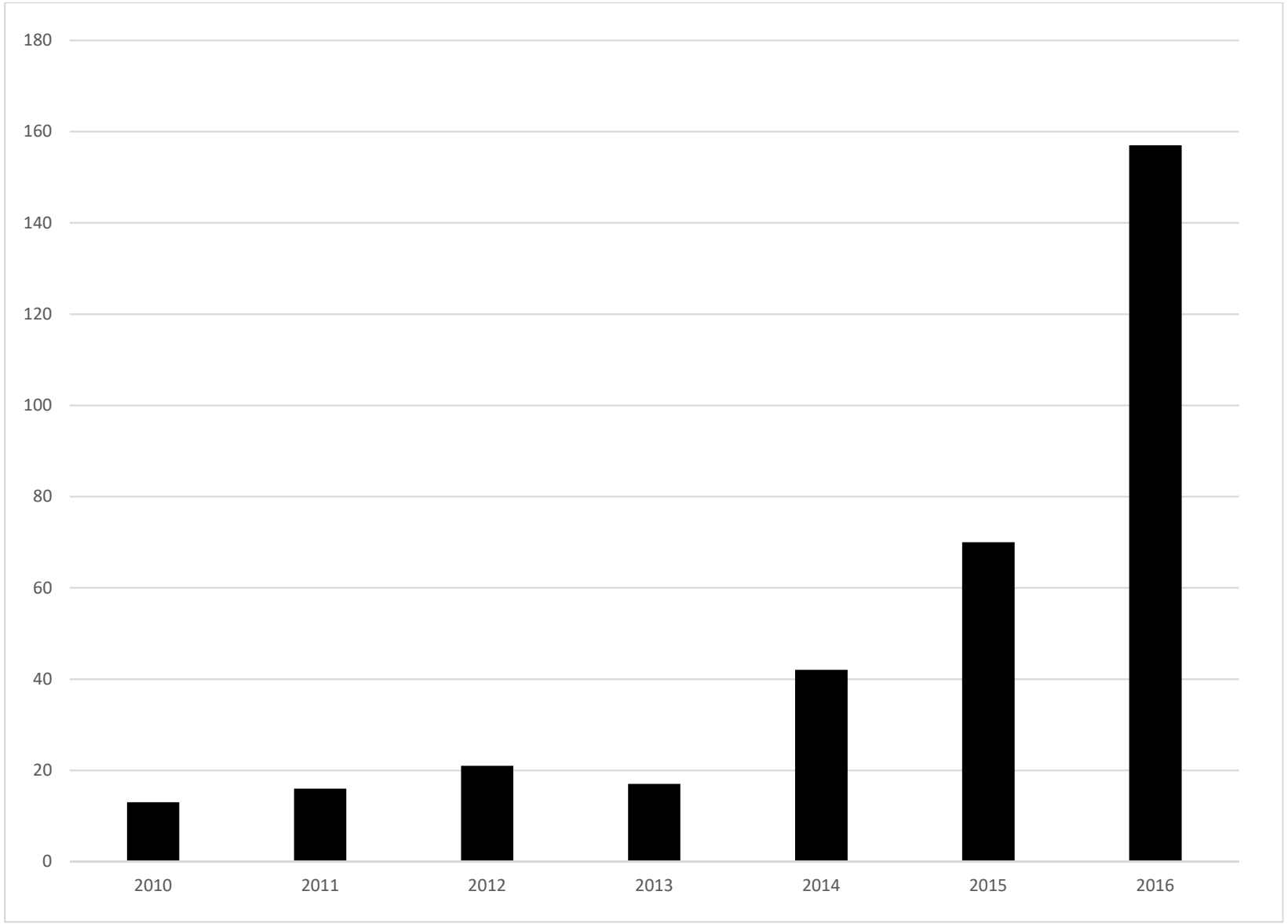

Figure 1. Frequency of Content on Opioid Epidemic by Group and Year

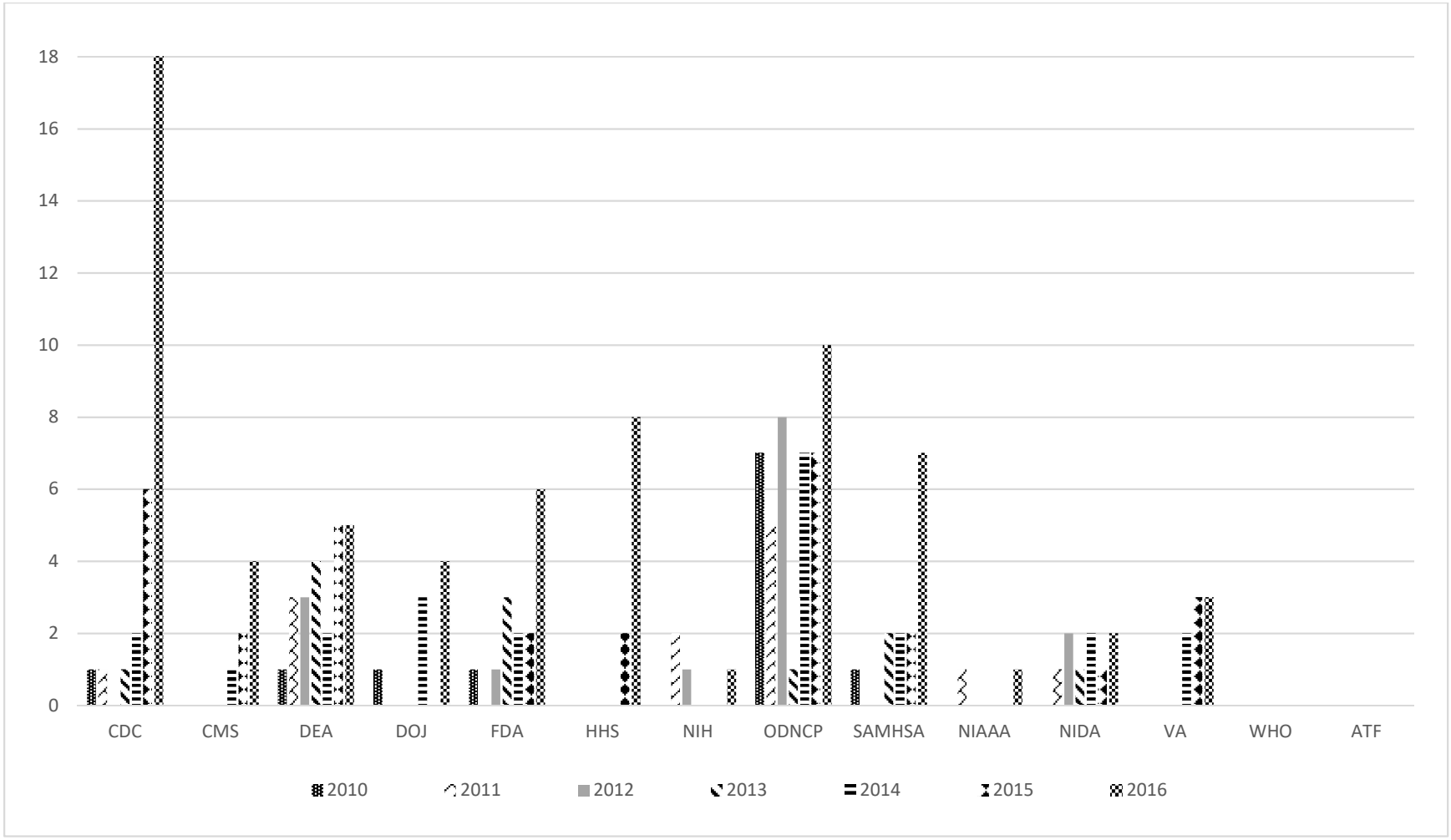

Figure 2. Governmental Agencies: Frequency of Content on Opioid Epidemic

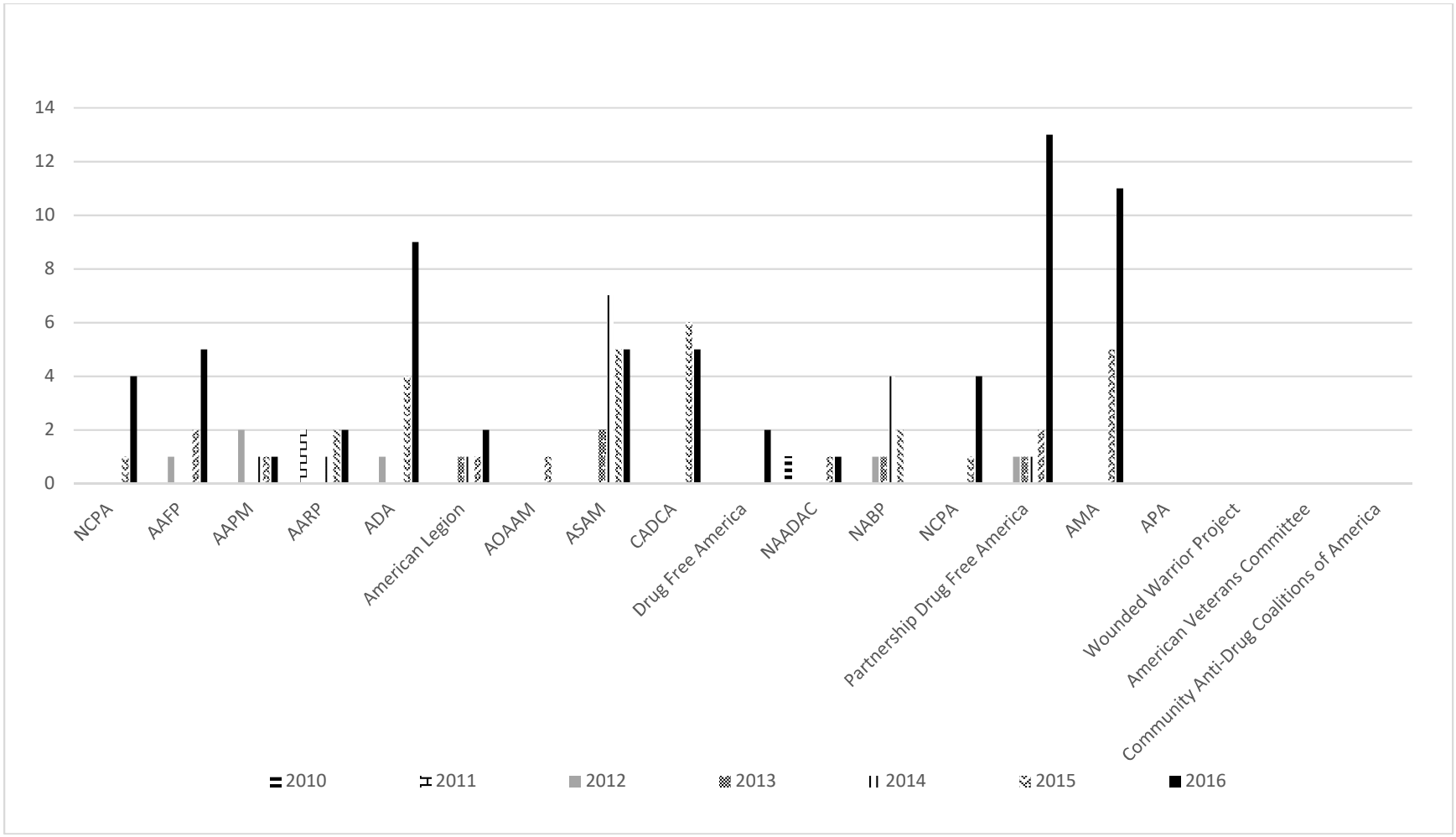

Figure 3. Special Interest Groups: Frequency of Content on Opioid Epidemic

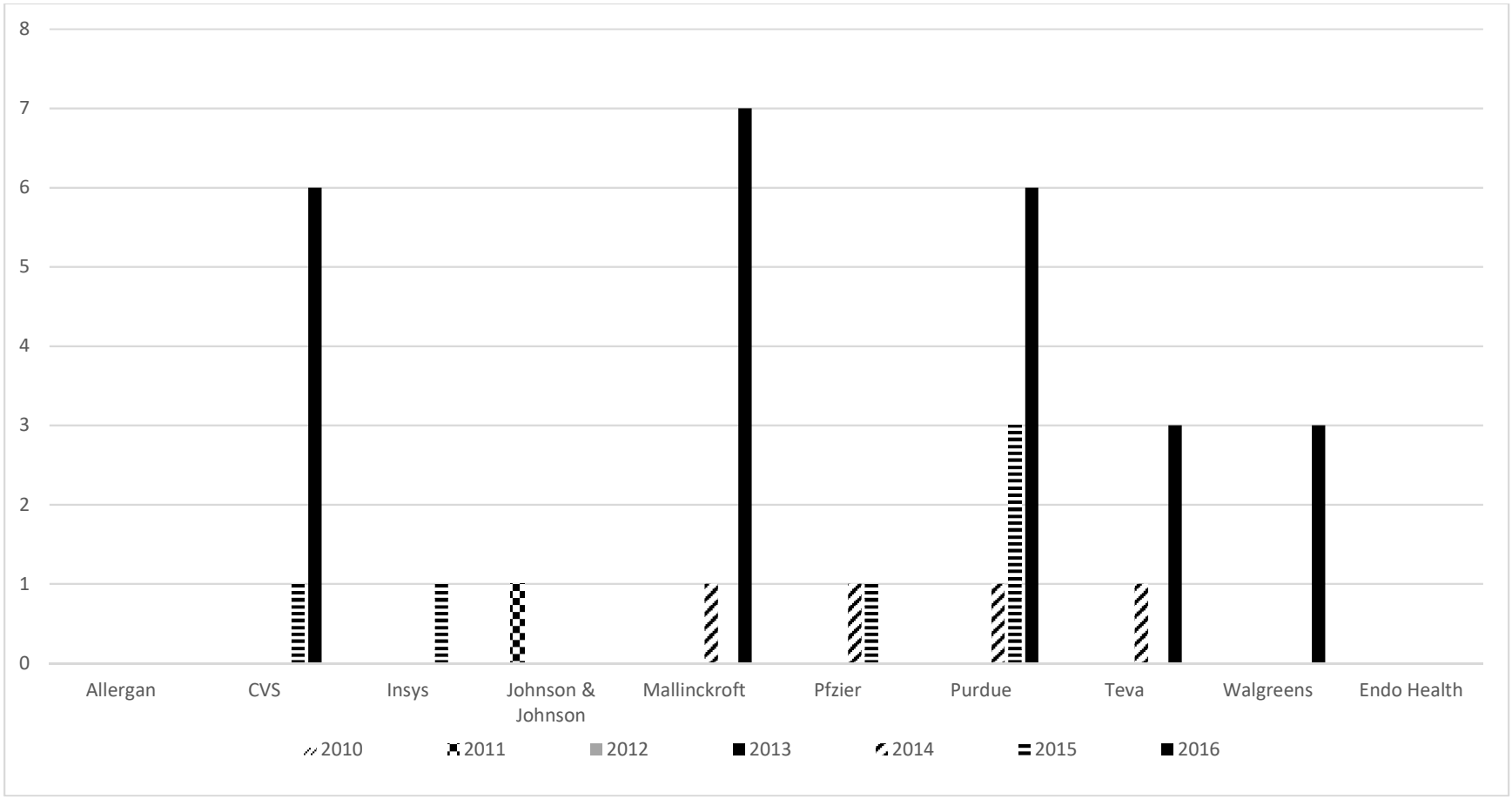

Figure 4. Professional Organizations: Frequency of Content on Opioid Epidemic

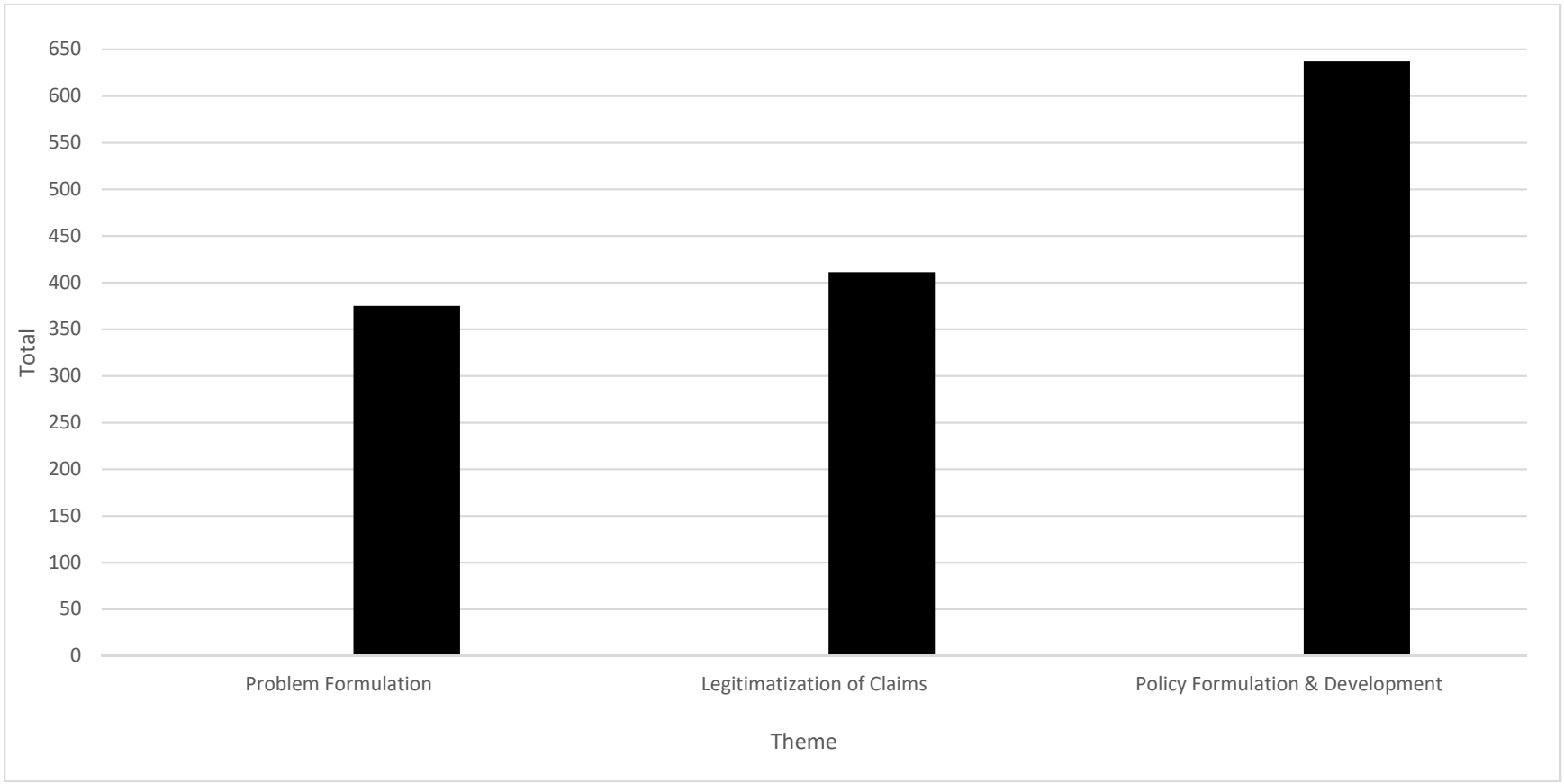

Figure 5. Frequency of Social Construction Themes on Opioid Epidemic

The more frequent claims-making groups display or release information about opioids and the crisis allows them to manage the narrative and reach a vast audience. It is important to understand what social construction themes are more prevalent. Results, in Figure 5, show these groups dispensed more information about policy formulation and development. More than 630 rhetorical statements (about 45% of total statements) were about policies aimed at resolving the opioid epidemic. Approximately 29% (411 statements) of the themes were groups legitimatizing their claims by using statistics, graphs, or other images to inform the public about the prevalence and growth of the opioid problem. In about 26% of the total rhetorical statements about the opioid crisis was claims-makers defining opioids as America's next social problem.

The yearly trends of the social construction themes follow a similar pattern of the overall content (Figure 1) claims-making groups generated about the current opioid problem. Figure 6 shows each theme exhibits a similar trend with a steady decline occurring in 2013 followed by sharp increases in 2014-2016. Frequencies of both problem and policy formulation are comparable from 2010-2013, then each spiked each year after. However, the policy formulation and development thematic statements (103, 340) more than doubled the number of problem formulation statements (78, 146) in 2015 and 2016. Whereas, the frequency of the legitimatization of claims theme was consistently lower than the other two themes, but eventually it reached similar quantities to the problem formulation theme in 2015 and 2016. These findings provide further evidence that claims-makers were not consistently discussing opioids or the epidemic until 2016 which may have made it difficult to present the idea opioids were a problem. Most of the social construction themes surrounded the formulation and development of policies to address the growing opioid problem.

Categorical data was collected pertaining to each social construction theme that helps to boost the claims-makers argument about the presence of the opioid epidemic. The number categories range from one to five. Problem formulation theme consisted of just the rhetoric category. More than 25% of all categorical information was related to the rhetoric claims-makers used to define opioids as a problem. The legitimatization of claims included the following subcategories: prevalence, growth claims, social spectrum claims, associated evils, and inefficient policies. Data results show that 241 out of 411 (58%) statements were related to prevalence about opioid use, misuse, abuse, and death. Growth claims (39%) was the next subcategory that claims-makers utilized to highlight the presence of the opioid crisis followed by inefficient policies (7%), associated evil links (4%), and social spectrum claims (4%). Resolution strategies made up an overwhelming 97% of the subcategory under the policy formulation and development theme along with representing more than 43% of the overall content. Whereas, policy development only consisted of a mere 3% of the total thematic statements. These subcategories reveal how claims-makers are using rhetorical statements to justify their claims about the opioid epidemic.

Governmental agencies, such as the CDC, FDA, NIH, NIDA, and DEA, generate the most content about opioids and the epidemic which also is reflected in the large quantity of social construction themes and subcategories produced by this group (Figure 7). Approximately 60% of all the themes are constructed by governmental agencies. Special interest groups, including AMA, ADA, AARP, and CADCA, created about 30% of the total themes related to the opioid problem in comparison to only an estimated 9% by professional organizations. Professional organizations, such as CVS, Pfizer, Johnson & Johnson, and Purdue Pharmaceutical, are the last group to really get on board about producing rhetoric about opioids.

As observed in other findings, each social construction theme followed a similar yearly pattern as the overall content despite the group affiliation. The observed pattern is a slow rise in 2010-2011 then a slight decline in 2013 with sharp increases from 2014-2016 (Figure 7). In addition, these yearly trends show that governmental agencies produced two times the amount of rhetorical statements within each categorical theme. In some instances, the amount of the content is ten times more than special interest groups or professional organizations. Results continue to display evidence that governmental agencies are controlling and directing the narrative surrounding the opioid epidemic. In more recent years is when special interest groups and professional organizations decided to join in the conversation.

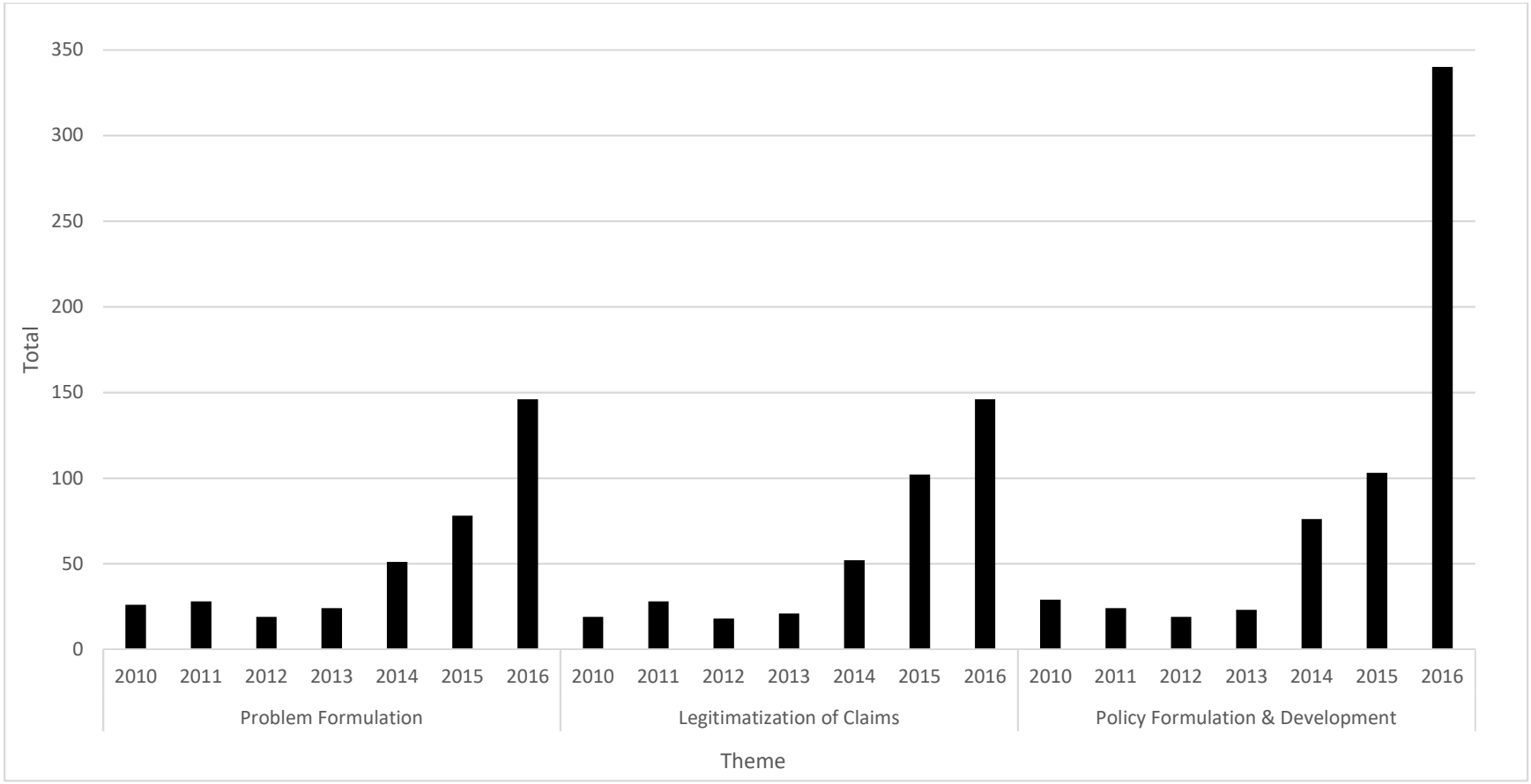

Figure 6. Frequency of Social Construction Themes on Opioid Epidemic by Year

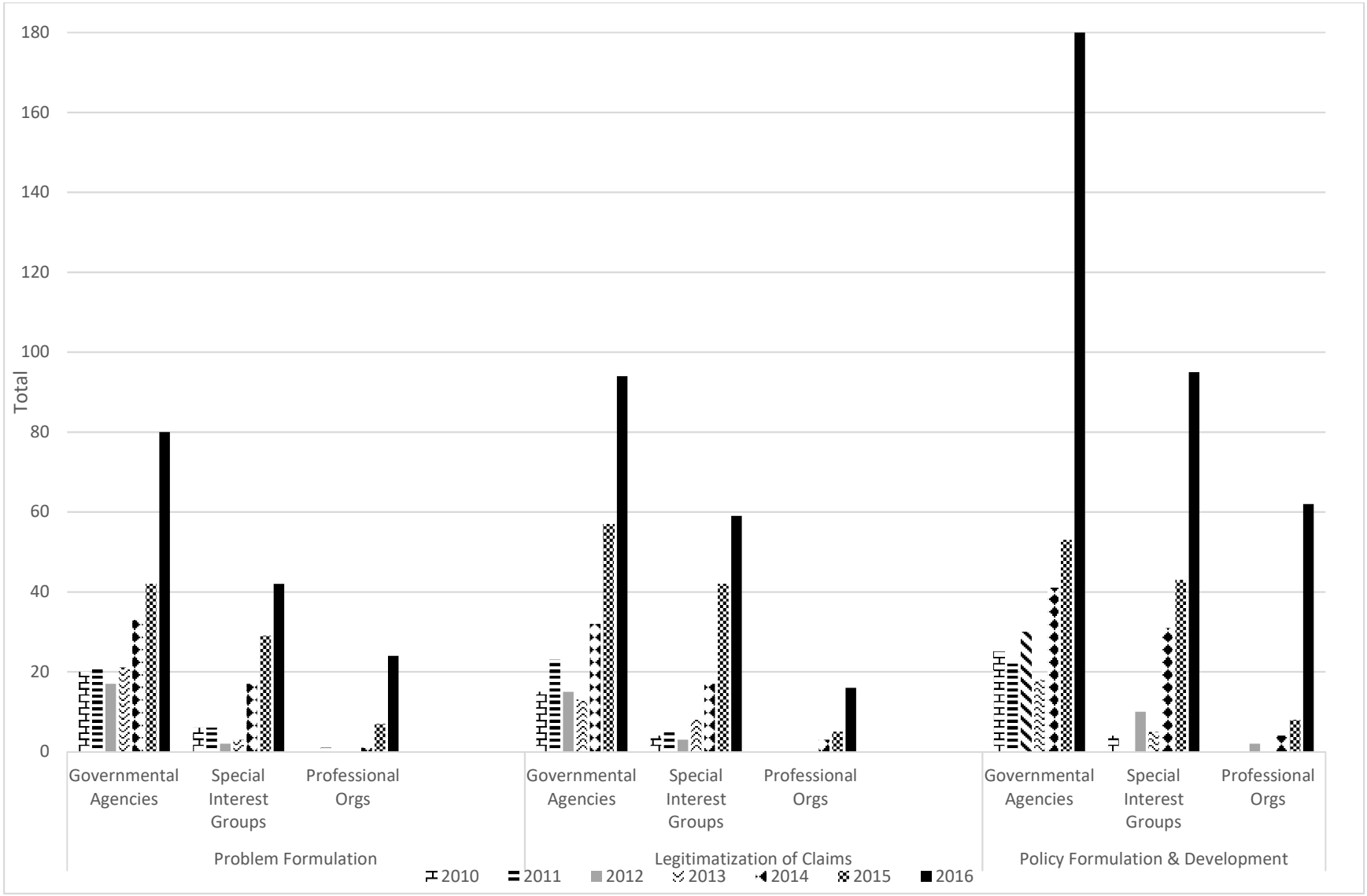

Figure 7. Frequency of Social Construction Themes by Categorical Group and Year

In conclusion, the frequency of the rhetorical content about opioids, heroin, fentanyl, and the epidemic in the United States slowly gained attention in 2010-2013 then started growing in 2014 with rapid rises in 2015 and 2016. Claims-making groups are mostly constructing and releasing rhetorical content related to policy formulation and development. More specifically, resolution strategies aimed at reducing opioid abuse, overdoses, and deaths is the subcategory most frequently discussed amongst the content. Governmental agencies are making the most noise about the opioid epidemic as observed in the quantity of rhetoric consistently being released. However, there are still several groups, who have stakes in making claims about the opioid epidemic, that have not been participating in displaying rhetoric about opioids. By frequently producing a large amount of rhetoric allows claims-makers to state there is an opioid epidemic present in the United States

Allocated Resources

Fiscal Budgets and Opioid Prevention

In order to resolve the opioid crisis, claims-makers argue that we must implement new policies or develop resolution strategies. The only way to achieve implementation of these resolution strategies is having access to money. Without monetary funds, it is difficult for any resolution to be executed. As a result, claims-makers are starting to request more money to be included in their fiscal budgets each year. However, some groups are not given governmental funds each year as governmental agencies are. Special interest groups or professional organizations must dig into their yearly profits to allocate money towards addressing the opioid crisis. This showcases the importance of why claims-making groups generate and distribute frequent rhetorical content about the growing opioid crisis in the United States.

Only seven (16%) claims-making groups actually contributed money towards opioid prevention or advocacy (Appendix C). These groups include the CDC, FDA, HHS, SAMHSA, NABP, CMS, and NIDA. Therefore, a small amount of funds is being allocated to resolving the opioid problem. For example, SAMHSA was only contributing $1 towards opioid prevention for every $396 of their yearly budget in 2010 while, the CDC was allocating $1 to this same area for every $164 of their yearly fiscal budget. Both HHS and NIDA were consistently allotting significantly more money to opioid advocacy strategies. For every $0.42 (HHS) and $10.51 (NIDA) of the yearly budget a dollar was given to opioid resolutions in 2010. CMS did not start outlining money towards the opioid problem until 2015. For every $122 (average over two years) CMS gave $1 towards opioid initiatives, while the FDA only contributed $1 for every $122,500. These financial contributions remained consistent from these two governmental agencies. After 2014, the other claims-making groups started to assign more monetary funds in this area. In 2016, SAMHSA significantly increased the quantity of fiscal funds, $1 for every $26, being given to opioid advocacy. This was a similar pattern for other claims-making groups.

Numerous claims-making groups appropriated millions of dollars for drug related expenses, but there are no specific details about the amount dedicated to opioids. For example, in 2010 the CDC spent $148 million dollars which grew to $174 million by 2016. Centers on Medicaid and Medicare have spent an average of $25.3 million on drug expenses. Furthermore, two of the governmental agencies who deal with drugs on a daily basis, DEA and FDA, have spent millions to trillions of dollars on drug expenditures including establishing abuse deterrent drugs or diversion control programs. So, within their yearly fiscal budget these two claims-making groups are distributing funds on drug programs including opioids. Five of the forty-three groups (11%) provided drug related expense information. Three groups have dedicated funds

directly to addressing the opioid crisis. Budgetary data reveal that the CDC and FDA spend one dollar on opioid advocacy for every $3 - $8 dollars of yearly funds between 2010-2016.

More than 80% of the claims-making groups do not designate any sort of monetary resources for opioid prevention. If their claims are there is a high rate of opioid use, overdoses, and deaths occurring then why are these same groups not allocating the necessary funds towards resolving the issue? Fiscal data reveal millions to billions of dollars are either requested from governmental funds or generated profits (Appendix B). As data has shown above, all of these groups present a large quantity of rhetorical content (Figure 1) about the opioid epidemic, but the majority of them fail to contribute financially to this specific issue. Furthermore, a large percentage of both the content and categorical themes pertain to resolution initiatives which requires money to implement. Therefore, why are only a small fraction of groups supplying the necessary means to tackle the opioid crisis?

Opioid Research and Awards

An alternative method for claims-making groups to contribute to the resolution approaches is by conducting research or granting research awards on opioids. Data shows that more claims-making groups are involved with research or supplied grants for outside entities to perform drug research involving opioids. Fifteen of the forty-three (35%) claims-making groups do participate in research opportunities that study the effects of opioids, evaluate drugs aimed at counteracting the effects of opioids, formulate abuse-deterrent drugs, or assess the efficiency of opioid related programs whose primary goal is to lower the risk of abuse, overdose, and death. Another way groups aid in solving the opioid crisis is offering or awarding monetary grants involving the creation of drug monitoring programs and development of drug alternatives. Professional organizations and governmental agencies devote millions to billions of dollars in

these two areas. Some groups who give financial support to research are HHS, DEA, SAMHSA, Johnson & Johnson, Endo Health, Insys, and Pfizer. Research funds remain consistent or have increased in the past few years. However, the highest amount the FDA has given is $75,000 in 2012 whereas, the DEA has significantly increased financial contributions from $400,000 in 2010 to $10 million in 2016. For the past two years, the funds directed to the study of opioids and its effects has multiplied several times.

Financial data reveals that numerous claims-makers award grants to analyze opioid related topics, formulate abuse deterrent opioids, or create prevention programs. Six governmental agencies, including CDC, SAMHSA, or NIDA, gave out a range from 1 to 346 grants. Rather than providing funds to outside parties, professional organizations, such as Pfizer, Teva, or Mallinckrodt, are primarily focused on conducting their own research on the same topics. Each year professional corporations devote billions of dollars towards research and development. It is hard to say if how much is actually contributed towards opioid initiatives.

Drug revenue serves a dual role as it highlights how much professional organizations profit from opioid sales and allocate funds towards advocacy efforts. Mallinckrodt Pharmaceutical has profited millions of dollars from Oxycodone and Hydrocodone. In 2016, the company made over $300 million dollars in revenue on these two opioid drugs alone. Endo Health made more than $120 million from sales of Percocet and another $600 million dollars from other pain and controlled substances. Most professional corporations average over a $1 billion dollars in total drug revenue. However, a few of these organizations are utilizing profits to develop drugs to reduce opioid addiction or reverse the effects of opioid overdoses. For example, Endo Health and Insys have given millions of dollars for the formulation of Buprenorphine and Naloxone in the past several years, but this is only a small percentage of the overall revenue

these companies make each year. More specifically, only 0.70% of the Endo Health total drug earnings went to research on Buprenorphine in 2013 while 0.02% of Pfizer total revenue went to development of Buprenorphine and Naloxone.

A large percentage (65%) of claims-making groups are still not distributing any monetary resources to address the opioid epidemic. Groups who fail to assign funds to research include: ADA, ASAM, American Legion, VA, AOAAM, and NADCP which represent all claims-making categories. These results show a similar trend to the yearly fiscal data which raises the question: how claims-makers are yielding any changes to opioid abuse and misuse without dedicating the necessary means even when they collect a large quantity of revenue each year.

Lobbying Funds and Agencies

Approximately 35% (15 groups) received lobbying funds which is an additional source of money besides the yearly revenue or budget (Appendix D). Professional organizations and special interest groups collected several thousands to millions of dollars from lobbying groups. Examples of groups who obtained lobbying funds include: ADA, AMA, CVS, Walgreens, Walmart, AARP, AAFP, Pfizer, Teva, and ASAM. In terms of dollar amounts, the AMA averages $19 million dollars over the course of 7 years, AAFP averages $2.7 million, Pfizer averages $10 million, and Purdue averages $700,000. Having access to additional financial resources helps these groups promote awareness about the opioid problem and petition new laws. It is against the law for governmental agencies to receive any sort of financial compensation from lobbying groups.

On the other hand, governmental agencies have numerous clients lobbying on their behalf. Seven governmental agencies have a few to several hundred clients who advocated in support of the agency or its policies. Data reveals the average number of lobbying clients for the

following groups: HHS: 1000; CMS: 650; DOJ: 400; CDC: 150; DEA: 30; FDA: 400, and VA: 250. Claims-makers bringing awareness to the opioid epidemic are going to garner more support from lobbying groups that want to promote the urgency of the crisis. The quantity of agencies remains consistent for the seven years for most except HHS which had a significant decrease in 2015. The more people lobbying on behalf of a group who support policies about the epidemic increases their platform and recognition.

Lawsuits

In the past several years, results show that several professional corporations have been sued by citizens, states, and other private entities because of the adverse effects of manufactured opioid drugs. Most of the lawsuits ended up being settled out of court for millions of dollars. Purdue Pharmaceutical settled two lawsuits in the amount of $23 million dollars due incorrect patents and the addictive nature of OxyContin. Due to misleading labels on opioid prescription drugs. Pfizer reached settlements totaling $55 million dollars in two separate lawsuits. Teva settled for a total of $521.6 million dollars in lawsuits pertaining to bribery and misleading opioid market practices. Insys faced multiple lawsuits in which they paid out more than $13 million dollars related to false marketing practices of opioids and fentanyl spray, false medical bill claims, and kickbacks. Between 2012-2016, Johnson & Johnson were involved in seven lawsuits involving fentanyl patches and opioid marketing practices. Finally, both CVS and Walgreens were fined $108 million by the DEA for illegitimately filling prescriptions and allowing OxyContin to get on the black-market. Walgreens settled out of court for approximately $800,000 because pharmacists failed to check the Massachusetts state prescription monitoring database before filling an opioid prescription.

In summary, a small fraction of claims-making groups actually allocated financial resources to garner support and resolve the opioid epidemic. When groups did distribute funds for opioid prevention and advocacy, it was only a small quantity of the overall yearly budget or revenue. Conducting research or granting research awards is another way claims-makers were able to provide monies to initiatives to reduce opioid abuse and death, Nevertheless, the majority of the groups still do not assign any funds to opioid research or if they do it is a minimal amount. Special interest groups and professional corporations receive lobbying funds which goes to bring awareness to the opioid crisis along with pushing the development of new policies. Results show that governmental agencies have numerous agencies who advocate on their behalf which includes bringing attention to the growing opioid problem. Finally, several professional organizations have settled million-dollar lawsuits due to improper marketing practices of opioid prescription drugs or illegally filling opioid prescriptions which raises concerns about their authenticity in defining opioids as a problem.

Research Q3: Resolution Strategies

Both quantitative and qualitative data show claims-making groups offer numerous solutions to address the opioid epidemic. Common resolution initiatives include establishing medication assisted treatment (MAT), improving prescription medication practices, formulating abuse deterrent drugs, developing state prescription monitoring programs, enhancing education and training on safe opioid prescription practices, and increasing access to naloxone and buprenorphine (suboxone). Some claims-makers formed a task force whose primary purpose is to reduce opioid misuse.

Medication assisted treatment (MAT) is designed to offer patients access to treatment. Claims-makers argue that physicians and other personnel who prescribe opioid medications must

be knowledgeable about treatment options for patients who are showcasing signs of opioid abuse, misuse, or addiction. Additionally, treatment should be covered by insurance or Medicaid to make it affordable. Increasing access to medicated assisted treatment for opioid abuse is another recommendation. SAMHSA created a phone app, MATx, to make it easier to locate treatment centers.

Qualitative statements regarding medicated treatment assistance:

- *Increase access to medication-assisted treatment. Substance use disorders benefit from evidence-based treatments such as MAT. Physicians are encouraged to become trained in providing in-office buprenorphine to their patients. Insurers should cover every form of MAT, including for Medicaid patients, the incarcerated and those who have failed with previous treatments (AMA, 2016)*
- *Increase access to substance abuse treatment services, including Medication-Assisted Treatment (MAT), for opioid addiction (CDC, 2016)*
- *CADCA recognizes the importance of increased funding towards treatment. This funding is desperately needed for lifesaving Medicated Assisted Treatment (CADCA, 2016)*
- *The Substance Abuse and Mental Health Services Administration (SAMHSA) today announced the upcoming launch of MATx, a free mobile app that will provide health care practitioners with immediate access to vital information about medication-assisted treatment (MAT) for opioid use disorder (SAMHSA, 2016)*
- *The U.S. Department of Health and Human Services (HHS) is taking additional steps to address the U.S. opioid epidemic by further expanding access to medication-assisted treatment (MAT) for opioid use disorders (HHS, 2016)*

- *Addressing the opioid crisis is a top priority for the Administration and the Department. The Department is focused on three key areas: improving opioid prescribing practices, increasing the use of naloxone, and increasing access to MAT. In addition, the President has made addressing the prescription opioid abuse and heroin epidemic a top priority and issued a Presidential Memorandum last year on improving access to medication-assisted treatment (MAT) for opioid use disorders. Today's awards are an example of HHS taking every available step to expand access to MAT. Building on these efforts, the President's Budget includes a $1.1 billion initiative to help ensure that all individuals with opioid use disorders who want treatment are able to access it. (HHS, 2016)*

One of the most consistent recommended solutions is to improve prescription drug practices among medical, dental, and pharmaceutical professionals. Claims-making groups suggest that physicians or medical personnel should communicate with their patients the risks associated with opioids prior to prescribing the medication. Healthcare professionals must also be able to identify patients that pose a risk for opioid abuse and misuse to help reduce the chances of addiction and death. Some groups argue that physicians should decrease the quantity of opioid prescriptions they write. Constructing prescription guidelines is recommended along with finding alternatives to opioid medication to help decrease the risk of overdose and death. However, patients with chronic pain cannot be lost in the discussion as they may require opioid medication.

Qualitative statements about improving prescription practices:

- *Reach more than 4 million health care providers with awareness messaging on opioid abuse, appropriate prescribing practices, and actions providers can take to be a part of the solution in the next two years. (AARP, 2016)*

- *Reversing the deadly trends of the opioid epidemic can only be helped by safer prescribing practices by health providers treating chronic pain. ASAM looks forward to working with HHS and CDC to continue to improve the practice of prescribing opioid medications.*
- *The American Society of Addiction Medicine announces the release of its National Practice Guideline for the Use of Medications in the Treatment of Addiction Involving opioid use. The Practice Guideline will assist clinicians prescribing pharmacotherapies to patients with addiction related to opioid use. It addresses knowledge gaps about the benefits of treatment medications and their role in recovery, while guiding evidence-based coverage standards by payers. (ASAM, 2015)*
- *CDC study shows urgent need for improved prescribing practices. (CDC, 2015)*

Professional organizations, such as pharmaceutical companies, are now formulating abuse-deterrent opioid medications to lower the risk of misuse and death. This strategy does not allow the original form of the drug to be altered in any way (i.e., crush, dissolve). Research shows that these drug alternatives do decrease opioid overdoses and deaths which is especially true for the newly formulated OxyContin.

Qualitative statements about formulation of abuse-deterrent drugs:

- *Opioids can be abused in a number of ways. Abuse-deterrent formulations target the known or expected routes of abuse, such as crushing in order to snort or dissolving in order to inject, for the specific opioid drug substance in that formulation. The science of abuse deterrence is relatively new, and both the formulation technologies and the analytical, clinical, and statistical methods for evaluating those technologies are rapidly*

evolving. In working with industry, the FDA will take a flexible, adaptive approach to the evaluation and labeling of potentially abuse-deterrent products. (FDA, 2013)

- *An integral part of Mallinckrodt' s long term vision is to invest in and expand the use of abuse-deterrent technology in its product line. By employing products with these technologies with other efforts that target the multi-dimensional nature of this complex problem, we can help ensure cost-effective access to appropriate pain treatment for the millions of patients suffering from acute and chronic pain, while substantially reducing opioid misuse and abuse. Other critical elements of a comprehensive effort to address opioid abuse and misuse include: improving the integration of federal and state prescription drug monitoring programs and efforts, developing and sharing best practices both at the manufacturing and supply chain stage, improving stakeholder education for patients, providers, and the public at large, including redesigned Risk Evaluation and Mitigation Strategy (REMS) programs and education initiatives validated by measurable outcomes, and enhancing drug take back and addiction rehabilitation programs.(Mallinckrodt Pharmaceutical, 2016)*
- *Overdoses and overall prevalence of opioid prescription painkillers has decreased since abuse-deterrent extended-release oxycodone hydrochloride was introduced and propoxyphene was withdrawn from the United States market The study, "Rates of Opioid Dispensing and Overdose After Introduction of Abuse-Deterrent Extended-Release Oxycodone and Withdrawal of Propoxyphene," found that the total opioid dispensing rate decreased by 19% from the expected rate, and the estimated overdose rate attributed to prescription opioids decreased by 20%. (NABP, 2015)*

- *In today's guidance, the agency is encouraging industry efforts to develop pain medicines that are more difficult to abuse. Abuse-deterrent properties make certain types of abuse, such as crushing a tab let in order to snort the contents or dissolving a capsule in order to inject its contents, more difficult or less rewarding. It does not mean the product is impossible to abuse or that these properties necessarily prevent addiction, overdose or death – notably, the FDA has not approved an opioid product with properties that are expected to deter abuse if the product is swallowed whole. (FDA, 2016)*
- *Data analysis shows reductions in abuse, addiction, and opioid poisoning diagnoses in the first year following the introduction of reformulated OxyContin® (oxycodone HCl extended-release tablets) CII incorporating abuse-deterrent properties. (Purdue, 2015)*

Prescription drug monitoring programs (PDMP) is one of the most common resolution strategies being suggested by nearly all of the claims-making groups. A primary goal of PDMP's is to inform healthcare practitioners which patients are pill shopping for opioid medication and who have received numerous prescriptions for opioid medication. Another goal is to identify medical personnel participating in illegal prescription practices by writing or filling a large volume of opioid prescriptions. Furthermore, groups suggest it is necessary that each state PDMP share their data with others states in case patients cross state lines. The DEA was one of the main groups who helped get prescription monitoring programs established around the country to eliminate the effects of opioid use disorders.

Qualitative statements about prescription drug monitoring programs:

- *While PDMPs have been shown to be effective, Mallinckrodt believes there is significant improvement, including providing real-time data, incentives for utilization and interstate data sharing We support modifying PDMPs to make easy to use, real time data*

consistently available to pharmacies and prescribers. We urge the Medicare and Medicaid programs and other payors to offer financial incentives to prescribers and pharmacies that consistently use PDMP data as part of their prescription management practices. This incentive would address the costs associated with developing the capability to participate in PDMPs reviewing data when prescribing and inputting prescription data into the system. Furthermore, because experience has shown that abusers often will travel from one jurisdiction to another to secure opioids, it is critically important to make data available on a nationwide basis. In order to respect both the state and federal state interests found here, Mallinckrodt advocates for the formation of a joint state and federal commission with the authority to set up and implement uniform standards for data reporting and transparency to prescribers and pharmacies. (Mallinckrodt, 2016)

- *Mandatory utilization of Prescription Drug Monitoring Program (PDMP) data at the point of prescribing would require prescribers to review the patient's pharmacy prescription history, showing the prescriber whether the patient is doctor shopping (utilizing more than one prescriber to obtain controlled substance prescriptions). Based on these insights, the prescriber can discuss the issue with the patient and halt inappropriate use. Forty-nine states have operational PDMPs. (CVS, 2016)*
- *PDMP interoperability across state lines would allow prescribers full visibility into patient prescription fill patterns and reduce or eliminate doctor and pharmacy shopping that occurs across state lines. PDMPs can currently share data across state lines in 22 of the 49 programs. (CVS, 2016)*

- *The task force's initial focus will be on efforts that urge physicians to register for and use state-based prescription drug monitoring programs (PDMPs) as part of the decision-making process when considering treatment options. When PDMPs are fully-funded, contain relevant clinical information and are available at the point of care, they have been shown to be an effective tool to help physicians identify patients who may be misusing opioids, and to implement treatment strategies including referral for those in need of further care. "PDMPs vary greatly in efficacy and functionality from state to state," "Alone, they will not end this crisis, but they can provide helpful clinical information, and because they are available in nearly every state, PDMPs can be effective in turning the tide to end opioid abuse in the right direction." (AMA, 2015)*
- *Use prescription drug monitoring programs (PDMPs)—electronic databases that track all controlled substance prescriptions in the state—to identify patients who may be improperly using prescription painkillers and other drugs. (CDC, 2016)*
- *Action Items: Strengthen Prescription Drug Monitoring Programs (PDMPs) (DOJ, 2016)*
- *$48 million in new funding to strengthen and evaluate state-level prescription drug overdose prevention, including a major expansion of the Prescription Drug Overdose Prevention for States program to support efforts to reduce overdoses from opioids, as well as from other drugs. This investment would leverage existing activities funded through the Bureau of Justice Assistance's Harold Rogers Drug Monitoring Program (PDMP) and bring total CDC funding for this state prevention program to $68 million. These funds would support grants to all 50 states and Washington, DC, for improvements to prescription drug monitoring programs, such as interstate interoperability and improved proactive reporting. Grants will also support national-*

level activities, including patient safety improvements and enhancements in data quality and monitoring with an emphasis on real-time mortality data. (ONDCP, 2015)

Several of the proposed opioid initiatives requires improving healthcare education and training pertaining to opioid medication. The training would focus on safe prescription practices, identification of patients at risk of opioid abuse, medicated-assisted treatment options, prescription drug monitoring programs, and pain treatment alternatives. Overall, the goal is to prevent opioid abuse, overdose, and death. Claim-makers are requesting mandatory training programs and continuing education options on opioids for all healthcare personnel. This keeps people informed about the latest tools and news on opioids. Many programs cost very little to implement.

Qualitative statements about improving training and education on opioids:

- *In light of the expanding opioid epidemic in the U.S., FDA urges prescribers to take advantage of training on opioid prescribing, available as of March 1, 2013. This voluntary training will be provided at little to no cost through accredited continuing education activities supported by independent education grants. (FDA, 2013)*
- *On October 21, 2015 the Obama Administration announced federal, state, local, and private sector efforts aimed at addressing the prescription drug abuse and heroin epidemic. These include commitments by more than 40 providers groups- that more than 540,000 health care providers will complete opioid prescriber training in the next two years. (HHS, 2016)*
- *Today, the Office of National Drug Control Policy (ONDCP) and the National Institute on Drug Abuse (NIDA) launched a new online learning tool which will provide training for healthcare providers on proper prescribing and patient management practices for*

patients on opioid analgesics (painkillers). The launch of the tool builds upon previously announced Administration efforts to address the nation's prescription drug abuse epidemic through a balanced public health and safety approach and support the Administration's goal of reducing the misuse of prescription drug abuse by 15 percent by 2015. (NIDA, 2015)

- *In October 2015, the President announced a number of new public and private sector actions to address this issue, including a Presidential Memorandum on prescriber training and opioid use disorder treatment. He also announced a commitment by more than 40 provider groups that more than 540,000 health care providers will complete training on appropriate opioid prescribing in the next two years. After just over three months, these groups reported that more than 66,000 providers have completed prescriber training to date, putting them on target to meet their goal. (ONDCP, 2016)*
- *The new training materials, which include video vignettes modeling doctor patient conversations on the safe and effective use of opioid pain medications, are part of NIDA's NIDAMED initiative, created to help physicians, medical interns and residents, and other clinicians understand and address the complex problem of prescription drug abuse. In addition to providing more accessible and self-guided information for healthcare providers, the training modules will also provide an opportunity for healthcare professionals to earn continuing medical education (CME) credits. (ONDCP, 2012)*
- *Have more than 540,000 health care providers complete opioid prescriber training in the next two years. (AAFP, 2015)*

- *Prescriber education and training. The ADA encourages dentists—members and nonmembers alike—to take advantage of its free continuing education webinars on model opioid prescribing. The training modules include helping dentists recognize when a patient may be seeking opioids for non-medical purposes, and knowing how to approach and refer them for appropriate treatment. Other coursework is also available. Further, the ADA believes that dental schools should include appropriate education in addictive disease and pain management as part of the core curricula. (ADA, 2015)*
- *First, federal departments and agencies must provide training on the prescribing of prescription opioids to federal health care professionals who prescribe controlled substances as part of their federal responsibilities. (ASAM, 2015)*

Most, if not all, claims-making groups recommended increasing access to naloxone and buprenorphine (suboxone) to reverse the side effects of opioids and help people ease off the drugs. Claims-makers want Naloxone, known as Narcan, readily available for first responders and the public to assist with reversing opioid overdoses. People who are opioid dependent are being asked to carry Narcan in case they overdose. Buprenorphine is utilized to treat opioid dependence as well as alleviate the effects of opiate detox. Physicians are writing more prescriptions for both medications which increases the quantity of prescriptions pharmacies are filling. Many groups are requesting to expand access to Narcan and Buprenorphine because of the significant number of people with opioid use disorders. Having access to these two medications will decrease the number of opioid related deaths and overdoses as well as provide treatment for opioid addiction.

Qualitative statements regarding Naloxone and Buprenorphine:

- *In addition to that, CADCA applauds Walgreens' upcoming availability of the opioid/heroin overdose reversal drug naloxone, which will be sold without a prescription in the following states: Alabama, Arkansas, California, Colorado, Connecticut, District of Columbia, Idaho, Illinois, Indiana, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Minnesota, Mississippi, Montana, Nebraska, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, and Wisconsin (CADCA, 2016)*
- *A recent report by the Centers for Disease Control and Prevention (CDC) found that widely distributing Naloxone, and training people in how to use it, could save many lives. It has successfully reversed more than 10,000 drug overdoses since 1996. Naloxone is not effective in treating drug overdoses that do not involve opioids. 15 states and the DC have programs to distribute naloxone in the community. The programs train people to identify signs of an overdose and provide naloxone to people who use drugs and their loved ones. (Partnership for Drug Free America, 2012)*
- *Increasing access to naloxone saves lives. Expanding access to naloxone gives more people a chance to get the help they need: according to the National Bureau of Economic Research, five states that have adopted Naloxone Access Laws have seen a nine to 11 percent reduction in opioid-related deaths. Over the past two years, CVS Health has worked to expand access to naloxone without individual prescriptions in 43 states. (CVS, 2016)*
- *The National Association of Boards of Pharmacy (NABP) resolves to address the drug overdose epidemic crippling our nation by engaging with state and federal officials and*

representatives from national associations to support programs that involve an active role for pharmacists in expanding access to the opioid overdose reversal drug, naloxone. NABP commends the success of municipalities such as Quincy, MA, whose first responders have successfully reversed over 200 opioid overdoses by initiating the nation's first municipal naloxone program. NABP recognizes the value of pharmacists in assuring optimal medication therapy and promotes the pharmacist's role in delivering opioid overdose reversal therapy. (NABP, 2014)

- *The U.S. Food and Drug Administration today approved Probuphine, the first buprenorphine implant for the maintenance treatment of opioid dependence. Probuphine is designed to provide a constant, low-level dose of buprenorphine for six months in patients who are already stable on low-to-moderate doses of other forms of buprenorphine, as part of a complete treatment program. (FDA, 2016)*
- *The advisory also urges people dealing with heroin or other opioid problems to get treatment. Medication assisted treatment using FDA-approved treatments such as methadone, buprenorphine and extended release naltrexone can effectively treat heroin/opioid addictions and enable people to recover to healthy, productive lives. Those seeking treatment for opioid dependence can find help through SAMHSA's Treatment Locator at: 800-662-HELP (4357) or online at: http://www.samhsa.gov/treatment/index.aspx.(SAMHSA, 2014)*
- *Buprenorphine was approved as a treatment for opioid addiction in 2002 and is usually prescribed to patients by certified physicians, mostly in office-based treatment settings. Since its introduction the use and availability of the partial opioid medication has significantly increased. In 2005 5,656 certified physicians were prescribing*

buprenorphine to 100,000 patients. By 2010, 18,582 certified physicians were prescribing the medication to more than 800,000 patients. (SAMHSA, 2013)

- *Double the number of providers that prescribe naloxone -- a drug that can reverse an opioid overdose; Double the number of physicians certified to prescribe buprenorphine for opioid use disorder treatment, from 30,000 to 60,000 over the next three years. (AAFP, 2015)*

Finally, the DEA started the National Prescription Take Back Day in 2010, where the public is encouraged to remove unused or unwanted prescription opioid medication from their household. The goal of the program is reducing access to opioid medication which in turn decreases the risk of misuse or abuse. This is achieved by implementing proper and safe disposal mechanisms for the public by installing drop off boxes in local pharmacies around the country. Walgreens and CVS have partnered with the DEA to serve as official drop off sites. Claims-makers state most people obtain opioid medications from family or friends, so it is imperative to remove the unused medication from the home. Improving proper disposal practices of opioid prescriptions continues to assist with eliminating potential threats of opioid dependence. Over the past several years, the "Take Back Day" has been very successful because it is occurring in almost all 50 states along with disposing a high volume of prescription medicine.

Qualitative statements about proper disposal of opioid medication:

- *Counsel your patients: Discuss the safe use, serious risks, storage, and disposal of ER/LA opioid analgesics with patients and/or their caregivers every time you prescribe these medications. (Purdue, 2016)*
- *Mallinckrodt supports expanding programs that encourage appropriate storage and disposal of opioids to prevent unused medications from ending up in the wrong hands.*

We have donated more than 1.5 million drug deactivation and disposal pouches to community groups, law enforcement, schools, patients and families across the United States and will increase that number to 2 million by the first quarter of 2018. We have also supported drug take-back days and drug drop boxes with local law enforcement agencies. A partnership in St. Louis, MO alone helps discard about 3,500 pounds of prescription drugs every quarter. (Mallinckrodt Pharmaceuticals, 2016)

- *CADCA will begin working with local coalitions on a multi-year pilot grounded in research. Local coalitions will work to identify best practices in safe use, storage and disposal of medications, and determine if these best practices can be replicated in other communities. From this study, we will learn if an individual's behavior regarding safe use, storage and disposal is more influenced by messaging regarding their own, or family safety; safeguarding the community; or protecting the environment. (CADCA, 2015)*
- *In collaboration with the Partnership for Drug-Free Kids, CVS Health operates the Medication Disposal for Safer Communities Program, through which local police departments can apply to receive a drug collection unit. These receptacles give people the opportunity to dispose of unwanted medications, including controlled substances, that may otherwise be diverted, abused or contaminate our water supply. Since 2014, the program has donated more than 800 disposal units across the country and collected more than 100 metric tons of prescription drugs. Police departments can apply to receive a drug collection unit from the program here. (CVS, 2016)*
- *In the previous nine Take-Back events nationwide from 2010-2014, 4,823,251 pounds, or 2,411 tons of drugs were collected. (DEA, 2015)*

- *The DEA's Take-Back events are a significant piece of the White House's prescription drug abuse prevention strategy released in 2011 by the Office of National Drug Control Policy. Disposal of unwanted, unused or expired drugs is one of four strategies for reducing prescription drug abuse and diversion laid out in Epidemic: Responding to America's Prescription Drug Abuse Crisis. (DEA, 2013)*
- *That's why, today, I am announcing that we are expanding drug take-back efforts – by introducing new ways for people to safely dispose of old or unused prescription drugs. Through new DEA regulations, patients will be allowed to more easily join the fight against prescription drug abuse by dropping off their leftover medications at pharmacies, hospitals, clinics, and other "authorized collectors." Beyond authorizing new drop-off sites, the new DEA rule will allow long-term care facilities to assist in the disposal of prescription-controlled substances belonging to current or former residents. And most importantly, patients or their family members can mail their prescription-controlled substances to an authorized collector using pre-paid mail-back packages that can be obtained right from their pharmacy, or from other locations like libraries and community centers. (DOJ, 2014)*
- *NCPA played a pivotal role in the development of the DEA's final rule a year ago that allows pharmacies and other entities to include opioids in their drug disposal programs for unwanted and outdated medications. While that policy is far from perfect, it does allow community pharmacies to incorporate collections of such medications into the Dispose my Meds Initiative. (NCPA, 2016)*

Resolution strategies are the most common theme discussed by claims-making groups because they offer solutions to end the opioid epidemic in the United States. Without these

recommended initiatives, the groups fail to garner attention about the growing opioid crisis. The public want to hear about solutions that address opioid related issues rather than it is just a problem the country is facing. Furthermore, claims-makers are going to highlight how much money and resources are being allocated towards these recommended strategies. However, the strategies listed above include formulating abuse-deterrent drugs, expanding prescription monitoring programs, improving education and training, and implementing proper disposal methods are only a few on the very long list of answers presented by claims-making groups.

CHAPTER 5. DISCUSSION

This section summarizes the study findings pertaining to the role of claims-makers in the social construction of the opioid crisis, the frequency of rhetorical content about the opioid epidemic, the allocated resources and resolution strategies aimed at reducing the adverse effects of the epidemic. Policy implications are introduced followed by a discussion of the study and areas for future research.

Discussion

The purpose of the study was to examine the social construction of the U.S. opioid epidemic with a specific focus on the contributions of claims-making groups. Specifically, the study explores the role claims-makers have in the social construction process along with determining how frequently they are raising awareness and allocating resources to the opioid epidemic. Finally, it outlines the proposed policies or solutions aimed at resolving the opioid crisis. Both qualitative and quantitative data provided in depth findings as to which claims-making groups contributed more.

The first research question asks about the specific role claims-makers have in the social construction of the opioid epidemic. Qualitative findings reveal that numerous groups utilize rhetorical content to gain attention and foster support to justify their claims that opioids are a growing problem in the United States. Powerful rhetoric and content are used to draw attention to the high overdose, abuse, use, and death rates caused by opioids and heroin (Best, 1987). Key stakeholders, such as governmental agencies and advocacy groups (Spector & Kitsuse, 1975; Chauncey, 1980), emphasized the adverse effects of the opioid crisis by including the number of people who lost their lives, the consequences associated with opioid and heroin use, and the volume of people requiring treatment for opioid dependence. The problem formulation as well as

rhetoric the corresponding category to this theme, reveal the diverse rhetorical content produced by an assortment of key stakeholders used not only to draw attention to the negative effects of opioid use, but define it as a social problem.

Next, claims-making groups utilized legitimatization techniques as a vehicle to foster further support and persuade the public (Becker, 1963) that opioids are reaching epidemic levels. This is reflected as the second qualitative theme which is accompanied by several categories: 1) prevalence rates; 2) growth claims; 3) social spectrum claims; 4) associated evil links; and 5) inefficient policies (Best, 1987). Again, key stakeholders will use one or several of these legitimatization methods to justify their claims about the presence of an opioid epidemic in the United States. The purpose is to continue to cultivate awareness and support by introducing statistical facts or figures, exaggerating negative behaviors associated with opioid or heroin use, stating the epidemic reaches people from all social, racial, and economic backgrounds, and highlighting the inefficiencies of current policies. Groups who apply more than one tactic are going to be more successful at acquiring support for their claims which increases the call for change (Best, 1987).

Once opioids have been defined and legitimatized as a social problem, claims-makers will propose solutions or develop new policy initiatives to address the opioid crisis (Spector & Kitsuse, 1975). The final qualitative theme pertains to policy formulation and development along with the following two categories: resolution strategies and policy development. Many claims-makers constructed resolutions and introduced new policies with one goal in mind which is to reduce the risk of opioid misuse and abuse. The ultimate goal of claims-makers is to completely eliminate the social problem (Best, 1987; Reinarman, 1994). In order to end the epidemic, claims-makers offered multifaceted approaches and suggestions designed to modify a wide range

of troubled areas (Spector & Kitsuse, 1975). Furthermore, allocating resources or money is required to fund these solutions proposed by governmental agencies, special interest groups, and professional corporations. Without these funds, it is difficult to eradicate the opioid epidemic (Becker, 1963). Numerous groups are successful at gaining public attention because they speak in public arenas such as congressional hearings and forums (Hilgartner & Bosk, 1988) which generates more awareness about the opioid epidemic. Qualitative results show claims-makers are proposing more than one opioid prevention strategy with the intention of providing a well-rounded approach to solving the opioid crisis.

The findings showcase that claims-makers play an important role in the social construction of the opioid crisis. Without the generation and distribution of the rhetoric, the opioid epidemic would not have reached a national platform or received media attention. Legitimatization methods enhance the devastating effects of the opioid crisis along with highlighting the deficiencies of current policies. Displaying the negative impacts of the opioid epidemic will garner media attention and public support. Claims-making groups who utilize all three social construction steps are more influential and successful at bringing awareness to the opioid crisis. Opioid dependence is not going to be deemed harmful to societal norms without the impact of claim-makers persuading the public that this behavior is problematic (Best, 1987). Furthermore, claims-makers use justification strategies to demonstrate the epidemic is growing and affecting all American families. Similar to social problem research, this study reveals the same steps, strategies, and methods are used by claims-makers in the social construction of the opioid epidemic.

The second research question examines how frequently claims-makers are generating rhetoric and allocating resources to the opioid epidemic. The frequency and rhetorical content of the opioid crisis did vary significantly by year and claims-making group. From 2010-2013, only seven claims-making groups (3% of total content) were discussing opioids and the problems associated with the drugs. The majority of the rhetoric was being generated by governmental agencies (6 of 7 groups) such as the CDC, ONDCP, and SAMHSA. Over the next two years, the quantity of claims-makers and volume of the rhetorical content about the opioid crisis increased slightly. However, in 2013 there was a decrease in the amount of content (5% of total content) and the number of groups discussing opioids (9 of 43 groups). These findings show that only a few claims-making groups, mostly governmental agencies, were making noise about the risks associated with opioid dependence. This allowed these groups to drive the narrative about the opioid epidemic compared to groups who joined later (Best, 1987; Chauncey, 1980; Spector & Kitsuse, 1975).

By 2014, both the quantity of claims-makers and content on the opioid epidemic doubled. Forty-five percent (19 of 43) of the groups released forty-two articles (12.5% of total content) related to several topics including opioid, fentanyl, heroin, and epidemic. This increase led to the addition of special interest groups and professional organizations starting to produce rhetoric about the risks associated with the escalation in the rate of opioid related overdoses and deaths. Governmental agencies added to the growing list of claims-makers who were making noise to raise awareness about the opioid problem in the United States. Results show as the number of claims-making groups participating in the social construction process increases so does the amount of rhetorical content being generated about the opioid epidemic.

In 2015, both the frequency of the content and the number of claims-making groups again doubled. More than 65% (28 out of 43) of the total number of claims-making groups released at least one or more articles pertaining to the opioid crisis this year. An estimated 21% of all the rhetorical content about opioids, heroin, or the epidemic was released in 2015. This finding shows as more key stakeholders start to join the conversation about a social problem, the opioid epidemic, it increases the amount of rhetoric being released publicly to bring awareness and gather public support (Best, 1987; Becker, 1963).

A significant increase in the quantity of claims-makers and amount of content produced about the opioid crisis took place in 2016. Approximately 70% of all claims-makers published statements about the negative effects of opioids. Over 45% of the total rhetorical content pertaining to the opioid epidemic was distributed in 2016. The reason for this exponential increase occurred after the Centers for Disease Control and U.S. Surgeon General announced opioids had reach epidemic levels because of a substantial rise in opioid related deaths and overdoses. These results align with the escalation in the number of groups and content circulating after the epidemic declarations were made. With a considerable number of groups frequently displaying rhetoric about the opioid epidemic and its negative effects helps to boost awareness and requests for change (Reinarman, 1994).

From 2010 – 2016, numerous claims-making groups did not release any rhetorical content about opioids, heroin, fentanyl, or the crisis. More specifically, 13% of groups did not publish any information discussing the opioid problem occurring in the United States in 2016. In contrast, in 2010 more than 83% of all claims-makers did not distribute any articles, press releases, or website content pertaining to the opioid epidemic. A similar trend was found among the amount of the rhetorical content displayed each year. An average of 16 articles, press

releases, or website content displaying statements about the opioid problem was released from 2010 – 2013, whereas, the average number of articles was 89 from 2014 – 2016. More noteworthy are the eight groups (19% of all claims-making groups), such as the World Health Organization, Community Anti-Drug Coalition, or Endo Health, who did not circulate any content about the opioid epidemic from 2010 - 2016.

The majority of the rhetorical content, more than 50%, generated about opioids, heroin, fentanyl, and the epidemic were produced by governmental agencies. While, special interest groups and professional corporations released a combined 46% of all the content. Furthermore, several governmental agencies were some of the first groups displaying content concerning opioids in 2010 and consistently continued to release information from 2011-2016. This finding aligns with Best (1987) and Becker (1963) who state key stakeholders at the forefront of the social problem are going to drive the narrative and control the conversation.

Nearly all of the rhetorical statements (45% of total statements) pertains to policy formulation and development compared to problem formulation and legitimatization of claims themes. Claims-making groups want to bring about change by eliminating the opioid epidemic, so the results showcase the frequency and consistency of this idea. Resolution strategies, a category that falls under this theme, makes up over 43% of the overall content about the opioid epidemic. The next most common category was prevalence rates representing over 55% of the rhetorical statements in the legitimatization of claims theme. Similar to the frequency trends, governmental agencies generated more than 60% of all social construction themes. The yearly trends of social construction themes follow a similar pattern to the yearly rhetorical content released by claims-making groups. Again, governmental agencies released two to ten times more rhetorical statements than special interest groups and professional corporations. Findings

continue to show that governmental agencies are directing and managing the narrative about the opioid epidemic while special interest groups and professional organizations only recently started making claims.

In order to implement the proposed resolution strategies, claims-making groups must allocate monetary funds and resources (Hilgartner & Bosk, 1988; Best, 1987). However, only 16% (7 out of 43) of claims-making groups were contributing any sort of finances to opioid prevention and advocacy initiatives. Dollar amounts varied significantly by group and year. Governmental agencies, such as the CDC, HHS, and FDA, were only assigning a small fraction of their yearly budget or profits to resolving the opioid epidemic. Annual spending patterns reveal that only a few claims-making groups were consistently allocating funds to this topic in 2010, but overtime a few more groups started distributing funds for opioid prevention and advocacy. Groups with a larger budget influence the implementation of solutions and policies (Hilgartner & Bosk, 1988); however, few groups actually assign monies to this topic.

Each year claims-making groups appropriate millions or billions of dollars for drug expenditures. But only the DEA and FDA actually made financial contributions to establishing abuse deterrent drugs or diversion control programs. In total, only 11% of all the claims-making groups allocated drug related funds directly to addressing the opioid epidemic. Monetary amounts fluctuated from year to year; however, claims-making groups started to contribute additional financial resources towards opioid related prevention initiatives in 2015 and 2016.

Another way claims-makers contributed to resolution strategies was by conducting research or awarding research grants. Approximately 35% (15 out of 43 claims-making groups) participated in research opportunities that study the effects of opioids and formulation of alternative drugs to reduce the risk of opioid abuse or addiction. Both professional organizations

and governmental agencies were providing millions to billions of dollars to develop resolution strategies or new policies to lower the rate of opioid use. Research funds have remained consistent for the past several years but increased significantly in 2016. Similarly, the number of research awards granted, and the monetary values associated with the awards varied from year to year. Six governmental agencies, such as the CDC or FDA, gave millions to billions of dollars to evaluate opioid related topics. Whereas, professional organizations, including Purdue, Pfizer, or Teva, invested billions of dollars of their own money on research and development, but it is difficult to know if it is on opioid initiatives.

Professional corporations profit each year from drug sales including opioids, such as Oxycodone or Hydrocodone. Drug revenue significantly increased from 2010-2016. However, only a few organizations are investing profits in formulating drugs to reduce opioid addiction or reverse the effects of opioid overdoses. Profits continued to rise for corporations after the formulation of Naloxone or Buprenorphine because it generated drug revenue. Only a tiny percentage of the total drug revenue these companies are making go towards opioid prevention.

Lobbying is another source of funds that are utilized by 35% of claims-making groups. From 2010-2016, lobbying funds did vary significantly by group while the amounts continuously increased. Special interest groups and professional corporations receive millions of dollars, which is a tool to promote awareness about the opioid epidemic and to petition new policies. Governmental agencies benefit from having a large quantity of agencies advocating in support of their policies and ideas. The number of agencies lobbying on behalf of governmental agencies remained consistent over the seven years.

More than 80% of claims-making groups do not financially contribute to opioid prevention policies even though they continue to produce a substantial amount of rhetoric about

this specific issue. Each year all of these groups are requesting millions of dollars in governmental funds or generated billions in revenue that support other areas rather than the opioid crisis. In addition, a large number of groups (65%) fail to allot monies for opioid based research that aid in the development of alternative drugs or treatment programs. Without any significant monetary resources being distributed to address the opioid epidemic, claims-makers are not reducing the risks associated with opioid use and abuse. It just seems that the claims-makers talk a big game by only producing rhetoric rather than dedicating the necessary means to resolve the opioid crisis.

For the past several years, professional corporations have been sued by citizens, states, and other private entities because of the harmful effects of manufactured opioid drugs. This led to corporations settling out of court for millions of dollars whether there was one suit or seven. Most of the lawsuits pertained to the improper labeling or misleading marketing practices, illegally filling opioid prescriptions, and the addictive nature of prescription opioids. This is one of the reasons that professional corporations did not start making noise about the opioid crisis until 2015. Prior to 2015, professional corporations more than likely were generating rhetoric about the positive effects of prescription opioids such as the pain relief being provided to patients.

Results from this study reveal opioid use did not become a social problem until claims-making groups deemed it harmful to society. This did not take place until after the CDC declared opioids an epidemic. Thus, numerous claims-making groups started consistently producing and releasing rhetoric pertaining to the opioid crisis even though research has shown opioids have been a problem since the early 2000s (Paulozzi et al., 2006; Rudd et al., 2016; Cai et al., 2015). Prior to 2016, only a small number of claims-making groups, consisting of mostly governmental

agencies, were actually generating noise and rhetoric about the opioid epidemic. Unlike other claims-making groups, professional corporations waited until 2015 to start making noise about the epidemic due to the following reasons: 1) a large number of lawsuit settlements pertaining to opioid prescription medication; and 2) the profits and benefits from the sale of opioid prescription medication. Qualitative findings reveal most of the rhetoric produced centers on outlining resolutions strategies and proposing new policies aimed at eliminating the opioid crisis.

Since the primary focus of claims-making groups is resolving the opioid epidemic, this requires money and resources. Yet, results show that the majority of claims-makers are not allocating monetary resources to opioid prevention and advocacy initiatives. Of the small proportion of groups who make financial contributions, only a small amount of funds is directed towards opioid prevention and advocacy. A few more governmental agencies and professional corporations started providing money for opioid related research after the CDC opioid epidemic announcement. These quantitative findings correspond with the timeline of the qualitative findings about the volume and frequency of rhetoric generated by claims-making groups. Additionally, findings raise questions about how much claims-makers are actually doing about the opioid epidemic, because many are only generating noise rather than allocating the necessary resources to fix the opioid problem. Findings from this study adds to the literature on the opioid epidemic. Previous research has not examined the social construction themes, frequency of rhetoric produced by claims-makers, or the monetary resources being allocated to resolve the opioid crisis.

The third research question inquired about some of the resolutions or policies proposed by claims-making groups. Many of these strategies involved establishing medical assisted treatment, improving prescription medication practices, formulating abuse deterrent drugs,

enhancing education and training on safe prescribing practices, developing state drug monitoring programs, and expanding access to naloxone and buprenorphine (suboxone). Several governmental agencies and special interest groups formed task forces to reduce the risk of opioid abuse and eliminate the opioid epidemic. However, quantitative data show that the majority of claims-making groups do not allocate the necessary funds toward opioid resolutions.

One of the most common recommendations is improving the prescription practices of medical and healthcare personnel. Since physicians and other healthcare professionals are frequently prescribing opioid medications, it is suggested that they decrease the number of prescriptions they write and be able to effectively communicate with their patients the risk associated with opioids. Another consistent solution is the development of state prescription drug monitoring programs that identifies patients who are abusing prescription drugs or physicians participating in illegal prescription practices. Claims-makers suggest doctors must prescribe naloxone and buprenorphine for patients who are at risk for misuse along with increasing the number of emergency or healthcare professionals who have these drugs on hand to save lives. Many pharmaceutical companies along with the FDA are formulating new abuse-deterrent opioid medications (e.g., OxyContin) to reduce the risk of misuse and abuse. To assist patients with opioid dependence, medical professionals need to communicate and be knowledgeable about treatment options or alternatives. Treatment options need to be offered to patients with opioid dependence. If the strategies described above are going to be implemented correctly it requires properly training and educating healthcare personnel.

Even though claims-makers offer solutions to the opioid epidemic does not mean these resolution strategies are being put into action. Of those policies and resolutions that are implemented, we do not yet know the impacts of them. As the previous two research questions

have highlighted, most claims-making groups present resolution ideas, but fail to distribute the necessary resources required for implementation. These qualitative findings just suggest that claims-makers present several recommendations on how to reduce opioid use and misuse. Many groups have constructed similar strategies that target healthcare professional prescription practices, formulation of abuse deterrent drugs, and provide medical assistant treatment options for opioid dependence. However, the overall objective of these new policies and practices are to eliminate the opioid epidemic altogether. But it is important to determine if these policies are effective. Another area of consideration is the claims-makers' response to the epidemic by creating treatment-oriented solutions. In contrast, previous research on drug scares or social problems, reveal that the policy formulation stage resulted in the development of more punitive policies and practices. For example, the War on Drugs resulted in a large proportion of African American males being incarcerated at a higher rate for crack cocaine than their Caucasian counterparts for the same quantity of powder cocaine (Chin, 2002; Fellner, 2000; Tonry, 1994). Finally, these findings help provide more insight on the number and type of resolutions being proposed along with who is outlining the solutions.

The findings in this study are important because claims-making groups are generating rhetoric about the opioid epidemic which then results in various forms of media presenting this information to the American public. By utilizing the social construction process, claims-makers will expand awareness and foster support from the public. As the public seeks more information about the opioid epidemic, the rhetorical content produced by claims-makers, which is found on their websites, is going to become a primary source of information. Once the public is persuaded there is an opioid epidemic in the United States, there is a call for change. Therefore, a platform

is created where claims-makers can propose resolution strategies to eliminate the problem altogether. Now, the claims-makers can maintain control of the narrative about the opioid crisis.

However, the findings also reveal the majority of claims-makers did not start generating rhetoric about the opioid crisis until the Centers for Disease Control declared it an epidemic in 2016. This raises the question if opioids have been a problem since the early 2000s (Paulozzi, Budnitz, & Xi, 2006; Rudd, Aleshire, Zibbell, & Gladden, 2016), why wasn't claims-making groups defining it as a problem then? Even in 2010, a small percentage of claims-makers were displaying an insignificant amount of rhetoric about opioid dependence. Furthermore, no monetary resources are being invested in resolving the opioid epidemic even though claims-making groups introduced numerous initiatives. This study is an example of how significant a role claims-making groups play in the social construction process.

This study does highlight several important findings regarding the social construction of the U.S. opioid epidemic; nevertheless, it still has its drawbacks. For example, only forty-three claims-making groups were used as a source of data. Even though there is an assortment of groups included, adding more claims-making groups could change the role claims-makers had in the social construction of the opioid epidemic especially in terms of how frequent content and resources were generated. In addition, expanding the timeframe to ten or twenty years may also have had an impact in this area. Several problems appear when using information obtained from websites as a source of data (Holt, 2010; Roberts, 2015). For example, when retrieving archived data, it can be difficult to locate or is no longer available (Holt, 2010; Damphouse, 2009). Some financial or budgetary data was either difficult to find, limited, or unavailable. Only utilizing one website to gather lobbying information may have excluded some data found on other websites. Press releases, articles, and other website content apart of this study were obtained by only using

five search keywords. It is the case that additional keywords could have generated articles or press releases that might affect the findings. In terms of intercoder reliability, using the Kappa or Cohen coefficient would have been a more suitable measure (Hayes & Krippendorff, 2007; Neuendorf, 2002; 2009).

As the findings show, additional research is needed on the social construction of the opioid epidemic and opioids. Future research needs to continue to explore the roles of claims-making groups in the social construction of the opioid epidemic and investigate how these roles have changed over time since President Trump declared the opioid crisis a national emergency in August 2017. Additionally, research must evaluate the effectiveness of resolution strategies and analyze newly developed policies aimed at tackling the opioid crisis. Finally, continued research should focus on determining how much resources are being allocated towards the opioid epidemic and has the funding patterns changed since 2016.

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APPENDIX A. CODEBOOK

Social Construction of the Opioid Epidemic

CODE BOOK

Instructions: Please review the articles to identify individual sentences that fit into one of the following rhetorical themes. Within in each theme, there is a corresponding category(ies) that each sentence will fit into. Themes and categories are developed from the social construction process. A definition and examples are provided for each theme and category.

Theme	Category	Definition	Examples
Problem Formulation:	Rhetoric	Claims-making group(s) defines the opioid epidemic as a social problem utilizing rhetoric.	*Opioid use disorder has reached epidemic levels in the United States. Since 1990, there has been exponential growth in opioid-related hospitalizations, overdoses, and deaths.* *"Every day, 44 people die in American communities from an overdose of prescription opioids and many more become addicted.* *Every day, I hear from another parent who has tragically lost a son or daughter to an opioid overdose. No words can lessen their pain.* *This crisis was caused, in large part, by decades of prescribing too many opioids for too many conditions where they provide minimal benefit and is now made worse by wide availability of cheap, potent, and easily available illegal opioids: heroin, illicitly made fentanyl, and other, newer illicit synthetic opioid.*

Theme	**Category**	**Definition**	**Examples**
Legitimatization of claims	Prevalence rate	Claims-makers present statistical data or percentages that display the prevalence of the opioid problem. This may pertain to opioid use, misuse, overdose, death, and opioid prescriptions.	*According to SAMHSA, nearly two million Americans abused or were dependent on prescription opioids in 2014.* *Almost half a million people lost their lives to drugs overdoses from 2000 to 2014. This startling increase in opioid overdose deaths was driven in large part, by overdoses from prescription pain relievers.* *As many as 1 in 4 people who receive prescription opioids long term for non-cancer pain in primary care settings struggle with addiction.* *45% of people who used heroin were also addicted to prescription opioid painkillers.*
	Growth Claims	Claims-makers present data or content about the growing opioid problem.	*Heroin use more than doubled among young adults ages 18–25 in the past decade.* *Deaths from heroin increased in 2014, continuing a sharp rise that has heroin overdoses triple since 2010. Deaths involving illicitly made fentanyl, a potent opioid often added to or sold as heroin, also are on the upswing.* *Prescribing rates varied widely by state: twofold for opioids, fourfold for stimulants, and nearly twofold for benzodiazepines.* *The increased use of prescription painkillers for nonmedical reasons (without a prescription for the high they cause), along with growing sales, has contributed to the large number of overdoses and deaths. In 2010, 1 in every 20 people in the United States age 12 and older—a total of 12 million people—reported using prescription painkillers nonmedically according to the National Survey on Drug Use and Health. Based on the data from the Drug Enforcement Administration, sales of these drugs to pharmacies and health care providers have increased by more than 300 percent since 1999.*

Theme	Category	Definition	Examples
	Social Spectrum Claims	Claims include phrases or sentences indicating the opioid crisis affects people from different ethnic backgrounds, races, and socioeconomic statuses	*Prescription opioid use varies according to age, gender, and ethnicity.* *Heroin use has increased across the US among men and women, most age groups, and all income levels. Some of the greatest increases occurred in demographic groups with historically low rates of heroin use: women, the privately insured, and people with higher incomes.* *The misuse of opioids – a class of drug that includes prescription painkillers and heroin – has devastated families and towns across the Nation.*
	Associated evil links	Claims-making groups suggest those who use heroin or opioids are likely participate in more violent or antisocial behavior	*Heroin is a highly addictive opioid drug that is illegal and has no accepted medical use in the U.S. Its use can result in a wide variety of health risks including exposure to infectious diseases such as Hepatitis C and HIV/AIDS (if taken through infected needles) and potentially fatal overdoses.* *Stealing additional medication nor falsifying prescriptions to obtain additional medication has become more common. However, instances of individuals turning to illegal drugs like heroin because it can provide the same sort of relief in a much more intense and dangerous fashion, has also become prevalent among all generations.* *But that can be tough recovering addicts. "Oxycodone is heroin in a pill," "It set off the craving, and I was back on heroin in, like, a minute."*

Theme	**Category**	**Definition**	**Examples**
	Inefficient policies	Claims-making groups identify and state the inadequacies of current opioid policies by highlighting the number of deaths, overdoses, and other failures.	*We know that the illegal diversion, misuse, and abuse of prescription opioids are often fueled by inappropriate prescribing, improper disposal of unused medications, and the illegal activity of a small number of health care providers. This highlights the important role that education of prescribers and patients can play in addressing this epidemic. The FDA has taken steps to address this, but more work remains to be done.* *Physicians receive little training about pain management or addiction treatment in medical school or in residency programs. As a result, there is a general lack of understanding and experience among most physicians related to these diseases. This lack of education reinforces the prevailing modes of practice: prescription opioids for pain management and an antiquated view of addiction as an acute behavioral problem for which treatment is only self-help or weeks of inpatient rehabilitation. It is the opinion of ASAM that a lack of education among most physicians about the proper treatment of chronic pain and chronic opioid addiction disease is a considerable contributing factor to the current opioid addiction epidemic* *We know that the illegal diversion, misuse, and abuse of prescription opioids are often fueled by inappropriate prescribing, improper disposal of unused medications, and the illegal activity of a small number of health care providers. This highlights the important role that education of prescribers and patients can play in addressing this epidemic. The FDA has taken steps to address this but more work remains to be done.*

Policy Formulation & Development	Resolution strategies	Claims-making groups offer solutions or recommendations to address the opioid epidemic. This could include allocating money or other resources.	*Today, the Office of National Drug Control Policy (ONDCP) and the National Institute on Drug Abuse (NIDA) launched a new online learning tool which will provide training for healthcare providers on proper prescribing and patient management practices for patients on opioid analgesics (painkillers). The launch of the tool builds upon previously announced Administration efforts to address the nation's prescription drug abuse epidemic through a balanced public health and safety approach and support the Administration's goal of reducing the misuse of prescription drug abuse by 15 percent by 2015.* *SAMHSA's Opioid Overdose Prevention Toolkit equips communities and local governments with materials to develop policies and practices to help prevent opioid-related overdoses and deaths, it is especially helpful for first responders treatment providers and those recovering from opioid overdose.* *ASAM's recommendations are also supported by the development of an ASAM clinical guideline on pharmacological therapies for opioid use disorders that will establish very clear boundaries around the proper use of buprenorphine in managing opioid addiction, including strategies for mitigating diversion like the establishment of treatment plans and routine random drug screens, pill counts, and prescription drug monitoring program reviews. Recognizing that best practice of chronic diseases requires attention to all elements of a biopsychosocial approach, the guideline also specifically addresses the utility of psychosocial supports in the treatment plan by doing a literature review of all the existing clinical evidence regarding these modalities in the context of medication management of opioid addiction.* *Prescribe and administer all opiate medications wisely. 2.Use opioid detoxification and replacement medications with an understanding of the larger personal recovery process of the*

Theme	Category	Definition	Examples
			individual and in the context of a comprehensive, multidisciplinary treatment plan. 3.Understand clearly what each medication can do along with its side effects and avoid common misconceptions. 4.Implement policies for administration of these medications and training of physicians and counselors that promotes mutual respect, cooperation and feedback and demands integrated and comprehensive treatment protocols.
	Policy development	Claims-making groups suggest, or present policy initiatives aimed at resolving the opioid crisis.	*On Friday the U. S. Drug Enforcement (DEA) will publish in the Federal Register the Final Rule moving hydrocodone combination (HCPs) from Schedule III to the more-restrictive Schedule II, as recommended by the Assistant Secretary for Health of the U.S. Department of Health and Human (HHS) and as supported by the DEA's own evaluation of relevant data.* *The AMA supports efforts to confront the opioid and prescription drug epidemic through meaningful legislation so physicians who are on the front line have the ability to best meet patient needs," "This legislation represents an important step in addressing the public health epidemic of opioid misuse, but it will not be fully realized without new resources to support these programs and policies. We look forward to continuing to work with policymakers, advocates, physicians and other health care professionals on efforts to prevent addiction and provide treatment for those suffering from substance use disorders."* *Sen. Joe Manchin (D-W.Va.) and five other Senators last week introduced legislation that would levy a 1-cent fee on every milligram of active opioid ingredient in each prescription pain medication sold. The money raised would be used to fund opioid addiction treatment. The bill. S. 2977, also includes a rebate program for cancer-related pain and hospice care, and exempts drugs used exclusively for the treatment of opioid addiction*

APPENDIX B. ANNUAL BUDGET & DRUG EXPENSES

BY GROUP & YEAR

SEE NEXT PAGE

Group	Year	Yearly Budget	Drug Related Expenses	Opioid Advocacy & Prevention Funds	Opioid Prevention Funds per Dollar of Yearly Budget	Opioid Prevention Funds per Dollar of Drug Expenses
CDC	2010	6,300,000,000	148,615,000	38,400,000	164.06	3.87
	2011	10,600,000,000	147,570,000	30,800,000	344.16	4.79
	2012	11,255,301,000	146,300,000	20,000,000	562.77	7.31
	2013	7,821,000,000	137,800,000	31,000,000	252.29	4.44
	2014	6,665,000,000	150,447,000	33,800,000	197.19	4.45
	2015	6,600,000,000	170,447,000	44,600,000	147.98	3.82
	2016	11,519,365,000	256,977,000	53,600,000	214.91	4.79
CMS	2010	503,000,000	23,700,000			
	2011	493,800,000	23,600,000			
	2012	506,700,000	37,100,000			
	2013	526,200,000	27,800,000			
	2014	548,900,000	23,700,000			
	2015	629,200,000	31,500,000	4,400,000	143.00	7.16
	2016	644,900,000	30,000,000	6,380,000	101.08	4.70
FDA	2010	3,200,000,000	908,013,000			
	2011	4,030,000,000	1,000,174,000			
	2012	4,360,000,000	1,151,788,000			
	2013	4,490,000,000	1,258,614,000			
	2014	5,640,000,000	1,292,175,000			
	2015	4,740,000,000	1,335,840,000			
	2016	4,900,000,000	1,371,580,000	40,000	122500	34289.50
HHS	2010	872,643,000		2,100,000,000	0.42	
	2011	901,927,000		2,100,000,000	0.43	
	2012	885,789,000		397,000,000	2.23	
	2013	932,234,000		1,782,000,000	0.52	
	2014	974,594,000		1,800,000,000	0.54	
	2015	1,020,284,000		36,000,000	28.34	
	2016	1,092,992,000		104,000,000	10.51	
NIDA	2010	1,045,384,000		102,114,000	10.23	
	2011	1,094,078,000		107,731,000	10.15	
	2012	1,080,018,000		146,736,000	7.36	
	2013	1,054,001,000		110,315,000	9.55	
	2014	1,071,612,000		92,600,000	11.57	
	2015	1,023,268,000		88,209,000	11.60	
	2016	1,047,397,000		109,343,000	9.57	

Group	Year	Yearly Budget	Drug Related Expenses	Opioid Advocacy & Prevention Funds	Opioid Prevention Funds per Dollar of Yearly Budget	Opioid Prevention Funds per Dollar of Drug Expenses
SAMSHA	2010	3,525,000,000		8,900,000	396.06	
	2011	3,700,000,000		8,900,000	415.73	
	2012	3,387,000,000		8,900,000	380.56	
	2013	3,400,000,000		8,000,000	425.00	
	2014	35,720,000,000		12,400,000	2880.64	
	2015	3,600,000,000		131,400,000	27.39	
	2016	3,700,000,000		139,000,000	26.61	
		23,900,000 (revenue);				
NABP	2010	20,400,000 (expenses)				
	2011	------				
		27,000,000 (revenue);				
	2012	24,500,000 (expenses)				
		26,800,000 (revenue);				
	2013	25,100,000 (expenses)				
		29,200,000 (revenue);				
	2014	27,100,000 (expenses)				
		34,000,000 (revenue);				
	2015	32,000,000 (expenses)		750,000		
		35,300,000 (revenue);				
	2016	34,400,000 (expenses)		900,000		
AMA (implementation of ACA)	2010	236,000,000 (revenue)	259,200,000,000			
	2011	247,000,000 (revenue)	258,600,000,000			
	2012	239,000,000 (revenue)	259,000,000,000			
	2013	258,000,000 (revenue)	265,000,000,000	23,400,000	11.02	
	2014	261,000,000 (revenue)	297,000,000,000	26,400,000	9.89	
	2015	308,800,000 (revenue)	324,600,000,000			
	2016	323,700,000 (revenue)	328,600,000,000			

APPENDIX C. OPIOID RESEARCH FUNDING & AWARDS

BY GROUP & YEAR

SEE NEXT PAGE

Group	Year	Research Funds on Opioids	Drug Revenue	Number of Research Awards (Grants)
CDC	2010	350,000		1
	2011			
	2012			
	2013	400,000		1
	2014	7,600,000		1
	2015	1,400,000 (Prescription Drug Overdose Prevention for States)		18
	2016	2,525,000 (Prescription Drug Overdose Prevention for States Program Supplement)		47
CMS	2010			
	2011			
	2012			
	2013			
	2014	23,156,000		
	2015			
	2016			
DEA	2010	400,000		1
	2011	1,100,000		46
	2012	400,000		1
	2013	400,000		1
	2014	1,600,000 (Prescription Drug Monitoring)		2
	2015	750,000 (Prescription Drug Monitoring)		1
	2016	10,000,000 (Prescription Drug Monitoring)		10
FDA	2010			
	2011	50,000		5
	2012	75,000		4
	2013			
	2014			
	2015			

Group	Year	Research Funds on Opioids	Drug Revenue	Number of Research Awards (Grants)
	2016			
HHS	2010	18,850,000 (Total amount - under sub-agencies)		15
	2011	4,100,000		5
	2012	11,630,000		23
	2013	13,900,000		63
	2014	12,275,000		9
	2015	195,050,000		368
	2016	551,710,000		179
NIDA	2010	5,000,000		4
	2011	2,700,000		30
	2012	6,650,000		10
	2013	3,000,000		9
	2014	400,000,00		2
	2015	4,550,000		10
	2016	4,775,000		9
SAMSHA	2010	400,000		1
	2011	500,000		1
	2012	3,600,000		8
	2013	2,000,000		21
	2014	4,400,000		9
	2015	11,000,000		11
	2016	506,300,000		96
Endo Health	2010			
	2011			
	2012			
	2013			
			Opana:197.5 million; Percocet: 122.4 million; Other pain & controlled substances: 602.3 million;	
	2014	154,200,000 (R&D total)	U.S. Branded Drugs: 969.4 million Opana: 175.8 million; Percocet: 135.8 million;	
	2015	102,200,000 (R&D total)	U.S. branded drugs: 1.3 billion	
	2016	183,400,000 (R&D total)	Opana: 158.7 million;	

			Percocet: 139.2 million; U.S. branded drugs: 1.2 billion	
Group	**Year**	**Research Funds on Opioids**	**Drug Revenue**	**Number of Research Awards (Grants)**
			New generic product: Exaglo :29 million; Zohydro ER: 38,32 million; Xartemis: 1,689 million;	
Teva	2010	900,000 (R&D total)	Total generic revenue - 4.6 billion New generic products: Actiq: 59 million; OxyContin: 1810 million;	
	2011	1,100,000 (R&D total)	Total generic revenue: 4.8 billion New generic products: Suboxone: 310 million;	
	2012	1.36 million (total R & D)	Total generic revenue - 4.4 billion New generic products: Opana - 61 million;	
	2013	1.430,000 (R&D total)	Total generic revenue: 4.2 billion	
	2014	1,490,000 (R&D total)	Total generic revenue: 4.4 billion	
	2015	1,520,000 (R&D total)	Total generic revenue: 4.0 billion New generic products: Subtex - 82.7 million;	
	2016	2,110,000 (R&D total)	Total generic revenue: 5.8 billion	
Pfizer	2010			
	2011	14,918,000,000 (R&D total)	67.8 million (total drug revenue)	
	2012	9,112,000,000 (R&D total)	23702 million (total drug revenue)	
	2013			
	2014	6,678,000,000 (R&D total)	18750 million (total drug revenue)	
	2015			
	2016			
Insys	2010	7,872,000,000(R&D total)	26369 million (total drug revenue)	
	2011			
		7,900,000 1.6 million (fentanyl);		
	2012	6.3 million (R&D total)	Subys: 8.6 million	
	2013			
	2014			
	2015			
	2016			

APPENDIX D. LOBBYING FUNDS & NUMBER OF CLIENTS BY GROUP & YEAR

SEE NEXT PAGE

Group	Year	Annual Lobbying Funds	Annual Number of Clients Lobby for Agency
AMA (implementation of ACA)	2010	21,960,000	
	2011	21,040,000	
	2012	16,130,000	
	2013	18,250,000	
	2014	19,650,000	
	2015	21,930,000	
	2016	19,140,000	
CDC	2010		169
	2011		176
	2012		173
	2013		155
	2014		166
	2015		154
	2016		169
CMS	2010		654
	2011		680
	2012		658
	2013		653
	2014		663
	2015		650
	2016		675
DEA	2010		34
	2011		30
	2012		28
	2013		21
	2014		27
	2015		28
	2016		21
DOJ	2010		505
	2011		476
	2012		420
	2013		375
	2014		401
	2015		315
	2016		320

Group	Year	Annual Lobbying Funds	Annual Number of Clients Lobby for Agency
FDA	2010		395
	2011		402
	2012		429
	2013		400
	2014		409
	2015		368
	2016		367
HHS	2010		1207
	2011		1180
	2012		1079
	2013		1003
	2014		966
	2015		821
	2016		781
AAFP	2010	3,163,518	
	2011	3,065,183	
	2012	2,597,215	
	2013	2,519,843	
	2014	2,438,717	
	2015	2,860,727	
	2016	2,787,620	
ADA	2010	2,580,000	
	2011	2,630,000	
	2012	2,560,000	
	2013	2,850,000	
	2014	2,460,000	
	2015	2,490,000	
	2016	2,240,000	
ASAM	2010	130,000	
	2011	110,000	
	2012	110,000	
	2013	120,000	
	2014	110,000	
	2015	120,000	
	2016	120,000	
AARP	2010	22,050,000	

Group	Year	Annual Lobbying Funds	Annual Number of Clients Lobby for Agency
	2011	15,170,000	
	2012	9,900,000	
	2013	9,610,000	
	2014	8,910,000	
	2015	7,559,000	
	2016	8,710,000	
VA	2010		284
	2011		289
	2012		278
	2013		280
	2014		287
	2015		240
	2016		262
Purdue	2010	880,000	
	2011	470,000	
	2012	710,000	
	2013	740,000	
	2014	810,000	
	2015	720,000	
	2016	714,000	
Endo Health	2010	1,950,000	
	2011	2,360,000	
	2012	2,210,000	
	2013	2,050,000	
	2014	1,460,000	
	2015	1,260,000	
	2016	1,750,000	
Teva	2010	2,890,000	
	2011	3,450,000	
	2012	3,040,000	
	2013	4,000,000	
	2014	3,800,000	
	2015	4,070,000	
	2016	4,280,000	
Allergan	2010	1,570,000	
	2011	2,220,000	

Group	Year	Annual Lobbying Funds	Annual Number of Clients Lobby for Agency
	2012	2,020,000	
	2013	2,271,590	
	2014	2,010,000	
	2015	5,140,000	
	2016	2,850,000	
Pfizer	2010	13,380,000	
	2011	12,890,000	
	2012	10,450,000	
	2013	8,970,000	
	2014	8,483,000	
	2015	9,417,650	
	2016	9,880,000	
Insys	2010	0	
	2011	0	
	2012	0	
	2013	0	
	2014	0	
	2015	20,000	
	2016	120,000	
CVS	2010	8,973,475	
	2011	9,599,321	
	2012	10,015,000	
	2013	13,128,502	
	2014	14,787,640	
	2015	15,230,000	
	2016	6,018,247	
Walgreens	2010	1,340,000	
	2011	2,390,000	
	2012	2,420,000	
	2013	2,580,000	
	2014	3,250,000	
	2015	2,190,000	
	2016	3,380,000	
Walmart	2010	6,090,000	
	2011	7,600,000	
	2012	6,130,000	

Group	Year	Annual Lobbying Funds	Annual Number of Clients Lobby for Agency
	2013	7,260,000	
	2014	7,000,000	
	2015	6,690,000	
	2016	6,800,000	
Johnson & Johnson	2010	6,700,000	
	2011	5,806,000	
	2012	5,880,000	
	2013	5,630,000	
	2014	5,980,000	
	2015	6,350,000	
	2016	5,710,000	