Overdoses in Poor and Rural Communities: The Reality of the Opioid Epidemic in the United States

Abstract: *The following paper takes a three-part approach to the Opioid Epidemic in the United States. Specifically, the paper argues the Opioid Epidemic has a disproportionate impact on poor and rural counties in the United States. Part I addresses the scope of impact, Part II addresses social structures, and Part III presents recommendations for solving the problem. A full conclusion can be found at the end of the paper.*

I: The Scope of the Epidemic

A. Opioid Use Disorder

Over the past three years, the world's attention focused on the COVID-19 crisis. Yet, as one pandemic raged, so has another epidemic – the opioid crisis. As of 2021, this epidemic claimed the lives of over one million Americans, fundamentally changing the lives of millions more. The opioid epidemic disproportionately impacts poor and rural counties in America. Therefore, the following paper aims to explain how opioid use disorder in disadvantaged communities across the United States has hindered what Martha Nussbaum calls central capabilities; specifically, life, bodily health, and emotions.

Opioids are a class of drugs that range between prescription pain relievers (ex: oxycodone, hydrocodone, morphine), heroin, and synthetic opioids (ex: fentanyl). Opioid use disorder is the "chronic use of opioids that causes clinically significant distress or impairment."[1] The disorder is characterized by an overwhelming craving to use opioids, increased tolerance, and withdrawal upon discontinuation of use.[2] Moreover, there is a continuum of opioid use disorder, ranging from opioid dependence to opioid addiction; addiction is the most severe form

[1] Alexander M. Dydyk, Nitesh K. Jain, Mohit Gupta, "Opioid Use Disorder," *StatPearl* (June, 2022). https://www.ncbi.nlm.nih.gov/books/NBK553166/
[2] Ibid.

of opioid use disorder.[3] Finally, opioid use disorder (OUD) is diagnosed as "opioid use and the repeated occurrence within 12 months of two or more of [the following] eleven problems:"

1. Opioids taken in larger amounts or over a longer period than intended;
2. A continuous desire to use or unsuccessful attempts to stop use;
3. Large amounts of time spent doing activities related to opioid use;
4. Craving opioids;
5. Opioid use causing failure to fulfill social and work obligations;
6. Use despite negative social or interpersonal problems associated with use;
7. Previous activities abandoned or decreased due to use;
8. Recurrent use despite physically dangerous settings;
9. Continued use despite physical and/or mental harms from use;
10. Increased tolerance to achieve the desired effect;
11. Withdrawal.[4]

Section A of Part I introduced opioids, and the meaning of opioid use disorder. Section B will describe the type of impact, and extent of the impact, that opioid use has had within the United States; specifically, within poor and rural communities and counties. Section C will relate the impacts to the central capabilities of life, bodily health, and emotions. Section D will conclude Part I's arguments and introduce Part II.

B. Type and Extent of Impact

[3] Ibid.
[4] American Psychiatric Association, "Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (May 2013).

In the United States in 2020, the odds of dying from an opioid overdose were greater than the odds of dying from a car crash.[5] The fact is that three million people in the US meet the criteria for opioid use disorder, and this disorder accounts for 47,000 deaths annually in the country.[6] When you break this down by gender, men are more likely to use opioids and have opioid-related overdoses. When looking at age, general opioid overdoses are highest among those between ages 40 and 50. Despite this fact, heroin affects a younger group, with overdosing peaking between 20 and 30 years of age. It is also clear that opioid-induced deaths are highest among non-Hispanic whites between the ages of 25 and 34 years.[7] Despite this statistic, the CDC found virtually all racial and age groups have seen increases in opioid-related deaths.[8]

Geographically, two-thirds of the counties experiencing above-average death rates from overdoses are in rural areas. Furthermore, zero counties in the United States experienced a decline in overdose rates. Instead, compiling data from several statistical sources, the Brookings Institute found that nearly every US county experienced an increase in drug overdose deaths between 2000 and 2015.[9] Of course, it should be noted that any time a source compiles data sets, there is a chance that the representative pools differ, providing statistics that may not be completely representative of a population. Despite this caveat, the data strongly illustrates that 72% of the counties experiencing "high to severe increases in overdose deaths" were rural. Furthermore, upwards of 80% of rural counties experiencing these increases do not have "non-profit substance abuse service providers," though it is unclear what other types of treatment

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[5] "Injury Facts: Preventable Deaths" *National Security Council*, accessed February 11, 2023, https://injuryfacts.nsc.org/all-injuries/preventable-death-overview/odds-of-dying/.
[6] Dydyk, Jain, Gupta, "Opioid Use Disorder."
[7] "Morbidity and Mortality Weekly Report MMWR," *Centers for Disease Control and Prevention* (November 2019), accessed February 11, 2023, https://www.cdc.gov/mmwr/volumes/68/wr/mm6843a3.html.
[8] "Morbidity and Mortality Weekly Report MMWR," *Centers for Disease Control and Prevention*
[9] Elizabeth Kneebone and Scott Allard, "A nation in overdose peril: Pinpointing the most impacted communities and the local gaps in care," *Brookings Institution* (September 25, 2017), accessed February 11, 2023, https://www.brookings.edu/research/pinpointing-opioid-in-most-impacted-communities/.

providers these areas have.[10] Nevertheless, these statistics demonstrate that areas suffering from the highest degree of increase of drug overdose, but without nonprofit aid, are disproportionately likely to be in rural counties.[11] It is important to clarify that the data does not conclude that the highest rates of drug use are in rural areas. Rather, the highest rates of *increase* are in rural areas.

Monetarily, poor counties are disproportionately experiencing the opioid epidemic. Only 13% of non-high-poverty counties reported above-average death rates, while over 41% of high-poverty counties did.[12] Furthermore, counties where poverty levels grew (or stagnated at very low income levels) saw larger degrees of increase in overdose deaths.[13] This could be in part to the lack of nonprofit substance abuse aid organizations in these counties. The evidence clearly illustrates rural and poor counties (which, of course, have some overlap) are experiencing higher increasing rates of the epidemic the United States is currently experiencing.

C. Impact's Relationship to Life, Bodily Health, and Emotions

Martha Nussbaum, an American philosopher, poses that the best way to ensure people can pursue a dignified life is through the "capabilities approach," a theory first created by Amartya Sen. Therefore, to fulfill a person's dignity, their central capabilities must be met with sufficiency. The ten central capabilities include life; bodily health; bodily integrity; senses, imagination and thought; emotions; practical reason; affiliation; other species; play; and control over one's environment.[14] This essay will focus on opioid use disorder's disproportionate effect on life, bodily health, and emotions for the most at-risk groups.

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[10] Ibid.
[11] Ibid.
[12] Ibid.
[13] Ibid.
[14] Martha Nussbaum, "CAPABILITIES AS FUNDAMENTAL ENTITLEMENTS: SEN AND SOCIAL JUSTICE." Feminist Economics, vol. 9, no. 2-3, 2003, pp. 33–59, https://doi.org/10.1080/1354570022000077926.

The clearest capability deficit in high-risk communities is to life. Life refers to "being able to live to the end of a human life of normal length… not dying prematurely."[15] The core of studying the opioid epidemic is that people matter. Their lives *matter*. The disproportionate amount of people in rural and poor areas prematurely dying (highest opioid death rates from ages 40 to 50) clearly demonstrates a failure of central capabilities being met.

The second capability deficit that results from opioid use disorder relates to bodily health, which is simply being able to have good health.[16] The central notion of capabilities is understanding what a person can *actually* achieve given their distinct circumstances. Those suffering the effects of opioid dependence or addiction are at increased risk for injury from accidents, bloodborne infectious diseases (if using injectable opioids), and suppressed immune systems.[17] Of course, physical dependence causes the body to crave opioids, not functioning properly without them. It also causes unpleasant side effects upon ceasing use known as withdrawal symptoms (e.g., irritability, vomiting, fever). Given that dependence and addiction are diseases, and many of those suffering from opioid use disorder have disproportionately fewer resources, the ability of users to *actually* achieve bodily health is hindered. Therefore, this paper postulates that the actual ability of high-risk communities suffering from opioid use disorder to achieve bodily health is not being met.

The final capability this paper focuses on is emotions, which are the ability to have attachments to things and people outside of ourselves. The great irony here is that for some, opioids fill this void – a manifestation of attachment that undercuts a person's ability to live a dignified life. Melissa, a woman whose addiction started at 22 following the birth of her first

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[15] Ibid.
[16] Ibid.
[17] "Opioid Use Disorder," *Yale Medicine*, accessed February 11, 2023, https://www.yalemedicine.org/conditions/opioid-use-disorder.

child, describes it this way: "heroin became the love of my life."[18] Melissa went on to explain how as her addiction took over, she put heroin before her family and children. She even admits to using pills before driving a bus full of children at the local daycare she worked for.[19] Melissa's candid account of her journey with addiction illustrates how opioid use disorder can strip a person of their "attachments" to *positive* things and people – undercutting Nussbaum's belief in the emotional capability to live a dignified life. Those who are underprivileged, or live in areas that are disproportionately affected by the increase in opioid overdose deaths, suffer these emotional consequences at higher rates. Therefore, as with life and bodily health, high-risk communities suffering from the opioid epidemic lack the genuine capability to fulfill the central capability of emotions.

D. Part One Conclusion

In the 21st century in the United States, people are dying at inconceivable rates from opioid use disorder. It is a tragedy that affects every race, ethnicity, and social class; yet opioid-related overdoses are increasing at higher rates in poor and rural communities. The actual capability of people in these areas to achieve the central capabilities of life, bodily health, and emotions are not being met. This is an inequality that should be solved because each person deeply matters. To step closer to a solution, the causes and consequences of the inequality of the opioid epidemic must be understood. The next part of this paper will do just that.

II: Geographic and Financial Burdens: Social Structures Affecting Rural and Poor Communities Affected by Opioid Use Disorder

E. The Importance of Social Structures

[18] "Chasing the Dragon: The Life of an Opiate Addict," *Federal Bureau of Investigations,* accessed February 11, 2023, https://www.fbi.gov/video-repository/newss-chasing-the-dragon-the-life-of-an-opiate-addict/view.
[19] "Chasing the Dragon," *FBI.*

While the harms associated with opioid use disorder in poor and rural communities are vast, the social structures contributing to these harms are crucial to understand. Social structures are stable, interconnected social and institutional arrangements that contribute to a society's choices. Given social structures' salience and dictation of choices, it is crucial to understand how they affect the ability to address opioid use disorder. Jon Eastwood breaks social structures into three groups: rules, representations, and relationships. Put simply, rules are "shared prescriptions and proscriptions."[20] Furthermore, rules "operate somewhere between informal norms and laws."[21] Representations are shared schemes of categorization.[22] For example, categories like classification, gender, and race. Finally, relationships refer to "any sustained interaction between individuals."[23] The following paper will touch on these structures, emphasizing the role that rules play in the geographic and financial structures that enable opioid use disorder to thrive in poor and rural counties.

Section F describes the geographic constraints to medical care that contribute to the harms associated with opioid use disorder. Likewise, Section G outlines the financial constraints. Section H relates these social structures specifically to Eastwood's Rs, namely rules. Section I ends with concluding statements.

F. Geographic Social Structures

As with many other resources, rural counties in the United States tend to lack access to basic healthcare. Furthermore, rural Americans are more likely than their non-rural counterparts to pinpoint access to healthcare as a central problem in their community.[24] Rural hospitals and

[20] Jon Eastwood, Social Structures Handout given in POV 423.
[21] Ibid.
[22] Ibid.
[23] Ibid.
[24] Onyi Lam, Brian Broderick, Skye Toor, "How far Americans live from the closest hospital differs by community type," *Pew Research Center* (December 12, 2018), accessed March 3, 2023, https://www.pewresearch.org/fact-tank/2018/12/12/how-far-americans-live-from-the-closest-hospital-differs-by-community-type/.

treatment facilities are frequently located throughout vast geographic ranges, which has been described as a "chronic scarcity of hospitals and clinics".[2526] Specifically, the average distance between the nearest hospital to rural communities is 10.5 miles. This translates to a 17-minute median car travel time to the nearest hospital, with the Q1 and Q3 times ranging between 5.8 and 34 minutes.[27] In contrast, urban residents have an average travel distance of 4.4 miles, and a median travel time of 10.4 minutes (with the Q1 and Q3 times ranging between 4.5 and 18.7).[28] Furthermore, it is imperative to note this geographic isolation poses great challenges for emergency vehicle response, especially in cases where "overdose antidotes such as naloxone" must be administered quickly after overdose (and only stays effective for up to 90 minutes).[29] Given the seriousness of the physical harms alone associated with opioid use disorder (i.e., overdose) it is clear why easy access to healthcare and primary care services are imperative.

While the lack of access to hospitals in rural communities is a problematic inequality, the implications of reliance on emergency departments raise other issues. Even more than the lack of access to hospitals, rural residents face significant shortages in primary health facilities, forcing them to rely heavily on the already-scare hospitals.[30] Given that primary health facilities provide yearly check-ups, the shortage of these in rural areas leads to both chronic pain and untreated injuries.[31] Unfortunately, emergency departments prescribe opioids at higher rates than primary

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[25] Khary K. Rigg, Shannon M. Monnat, Melody N. Chavez, "Opioid-related mortality in rural America: Geographic heterogeneity and intervention strategies," *International Journal of Drug Policy*, Volume 57 (2018), accessed March 3, 2023, https://doi.org/10.1016/j.drugpo.2018.04.011.

[26] N. Douthit, S. Kiv, T. Dwolatzky, S. Biswas, "Exposing some important barriers to health care access in the rural USA," *Public Health*, Volume 129, Issue 6 (2015), accessed March 3, 2023, https://doi.org/10.1016/j.puhe.2015.04.001.

[27] "How far Americans live from the closest hospital differs by community type," *Pew Research Center*

[28] Ibid.

[29] "Opioid-related mortality in rural America," *International Journal of Drug Policy*

[30] Ibid.

[31] Ibid.

care facilities. Specifically, a study of nearly 30,000 patients visiting emergency departments across the United States found that 17% left with prescribed opioids for pain.[32] In short, rural residents walk out of emergency departments with higher rates of prescribed opioids than their counterparts at primary care facilities. This means while access to basic healthcare and emergency services is lacking, the healthcare available is prescribing opioids at higher rates. This is problematic as studies find higher rates of opioid prescription correlate with higher rates of opioid addiction.[33]

Aside from healthcare facilities, rural areas also lack access to addiction treatment services.[34] Nearly 80% of counties that "have experienced the largest increases in drug overdose deaths and with poverty rates over 20%" do not contain any registered substance abuse nonprofits. This causes them to rely more heavily on publicly provided services through local healthcare systems (the same systems rural residents lack access to).[35] For example, Roger T. Winemiller is a middle-aged man living in rural Ohio who, after the loss of his two siblings to opioid overdoses, now struggles with the same issues. He explains how his drug treatment clinic is almost two hours away, making it inaccessible to many.[36] The lack of non-profit substance abuse facilities like Narcotics Anonymous leaves a gaping hole where many need a community to recover.

It is clear geographic isolation from healthcare facilities to treat opioid use disorder and its implications heavily influence the inequality of opioid misuse in poor and rural communities.

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[32] Jason A. Hoppe, Lewis S. Nelson, Jeanmarie Perrone, et al, "Opioid Prescribing in a Cross Section of US Emergency Departments," *Annals of Emergency Medicine*, Volume 66, Issue 3 (2015), accessed March 3, 2023, https://doi.org/10.1016/j.annemergmed.2015.03.026.

[33] National Institute on Drug Abuse, 'Increased Drug Availability is associated with increased use and overdose," accessed April 8, 2023.

[34] "Opioid-related mortality in rural America," *International Journal of Drug Policy*

[35] Elizabeth Kneebone and Scott Allard, "A nation in overdose peril: Pinpointing the most impacted communities and the local gaps in care," *Brookings Institution* (September 25, 2017), accessed February 11, 2023, https://www.brookings.edu/research/pinpointing-opioid-in-most-impacted-communities/.

[36] Jack Healy, "2 of a farmer's 3 children overdosed," (2017) accessed April 8, 2023. https://www.nytimes.com/2017/03/12/us/opioid-epidemic-rural-farm.html

G. Financial Restrictions

As one anonymous healthcare worker put it, "having worked in hospital finance I can assure you it is about the money."[37] On both the consumer and supplier side, medical care in the United States is costly. For example, there must be a financial transaction to receive medical care in the United States; moreover, there must be copious amounts of financial support to keep medical care facilities running. Unfortunately, rural and poor counties tend to lack these monetary resources.

On the consumer side, rural populations tend to be poorer than their urban counterparts. Rural residents also work in industries with "lower levels of employer-sponsored health care insurance coverage."[38] Moreover, nearly 66% of uninsured rural residents reside in states where Medicaid, the United States' public health coverage, has not been expanded.[39] [40] Insurance is a crucial element to affordable healthcare; without it, services and essential, lifesaving drugs come at much higher costs. For example, in Virginia, naloxone can cost up to $150 without insurance. The high cost of medical care leads to many people putting off a doctor's visit. As mentioned in Section F, avoidance of the doctor often leads to untreated illness and chronic pain, resulting in emergency room visits where opioids are prescribed at higher rates. This illustrates one way in which financial pressure leads to higher rates of opioid addiction.

On the supply side, rural hospitals face financial restrictions that lead to a shortage of treatment providers and facilities. In rural, poorer communities, hospitals face retention problems

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[37] Kelly Virella, "Doctors and Healthcare Workers Reflect on Rural America's Limited Access to Care," *New York Times* (July 19, 2018), accessed March 3, 2023, https://www.nytimes.com/2018/07/19/reader-center/rural-health-care.html.
[38] Exposing some important barriers to health care access in the rural USA, *Public Health*
[39] "Opioid-related mortality in rural America," *International Journal of Drug Policy*
[40] Vann Newkirk and Anthony Damico, "The Affordable Care Act and Insurance Coverage in Rural Areas," *Kaiser Family Foundation* (May 29, 2014), accessed March 3, 2023, https://www.kff.org/uninsured/issue-brief/the-affordable-care-act-and-insurance-coverage-in-rural-areas/

of medical providers. For example, studies find that "lower salaries, limited opportunities for continuing education, longer hours, and fewer resources" make it harder to recruit and retain medical professionals.[41] [42] Along with staffing shortages, many hospitals suffer from low patient volume and high overhead costs. These compounded issues resulted in 136 rural hospitals closing between 2010 and 2021.[43] Nineteen of these closures happened in 2020, likely a direct effect of the financial predicament brought on by the COVID-19 pandemic.[44] To be clear, these closings are the result of a lack of money to run them, as well as decision-makers finding them insufficiently profitable (a situation that many times goes hand-in-hand). Unfortunately, these closures directly affect the geographical restrictions to access rural residents face. More hospital closures lead to farther distances to the nearest hospital, which ultimately means life-saving services and care are out of reach for rural and poor sufferers of opioid use disorder.

H. Eastwood's Rs

The social structures that most clearly affect medical access for opioid use disorder sufferers are rules. As mentioned, rules are the norms and laws of society. A rule that regulates much of society is that goods and services mount some sort of financial cost. This remains largely true for medical care — whether it be payments paid via insurance, out-of-pocket, or non-profit services. Given this rule, and the high-cost and disproportionately low availability of work-provided insurance and Medicaid, members of poor and rural communities are facing this social structure at unequal rates. As outlined in Part One of this paper, poor and rural communities are also

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[41] "Opioid-related mortality in rural America," *International Journal of Drug Policy*
[42] Zina M. Daniels, Betsy J. VanLeit, Betty J, Skipper, et al, "Factors in Recruiting and Retaining Health Professionals for Rural Practice," *National Rural Health Association* (Winter 2007), accessed March 3, 2023, https://onlinelibrary.wiley.com/doi/epdf/10.1111/j.1748-0361.2006.00069.x?src=getftr.
[43] "AHA report: Rural hospital closures threaten patient access to care," *American Hospital Association* (September 8, 2022), accessed March 3, 2023, https://www.aha.org/news/headline/2022-09-08-aha-report-rural-hospital-closures-threaten-patient-access-care.
[44] Ibid.

disproportionately affected by the harms associated with opioid use disorder. It can be seen how financial costs to healthcare and life-saving services are exaggerated in areas where opioid use disorder is growing the fastest.

While rules are the most prevalent social structures, there is utility in mentioning representations as well. The widespread scarcity of healthcare, primary care, and emergency services illustrate that representation of poor and rural residents' basic needs in healthcare is severely lacking. Furthermore, even when healthcare is available, there is often a stigma that is associated with seeking treatment for opioid use. Unfortunately, this stigma can be exacerbated in small towns where "everyone knows everyone."[45] Therefore, while representation in health care is deficient, stigmatization of this disorder is also rampant.

I. Part Two Conclusion

In the 21st century, addressing inequality goes hand in hand with addressing social structures. Those who fail to highlight the impact that social structures have on inequalities not only fail to address the root causes of inequalities but give inadequate credence to how impactful the durability of social structures are. This durability means that many social structures have been in place for a long time, allowing many people to overlook them. In other words, people may become accustomed to social structures, or never even realize something is a social structure, and fail to question it. To create meaningful change, society must recognize social structures and their effects on inequalities. The next portion of this paper will go one step further. Understanding these social structures, Part III will propose how to address them in a meaningful way to mitigate the unequal effect that opioid use disorder has on poor and rural communities in the United States.

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[45] "Opioid-related mortality in rural America," *International Journal of Drug Policy*

III: Addressing the Issue: Increasing MAT and Telehealth Access

J. Addressing the Opioid Crisis

Thus far, this paper established the crisis the opioid epidemic poses for poor and rural American counties. Furthermore, key social structures contributing to this crisis have been identified. The third portion of this paper grapples with what ought to be done to address the structural injustices posed by the opioid epidemic.

Given the nature of the epidemic and the social structures surrounding it, two main recommendations are proposed for poor and rural communities: 1) increasing buprenorphine and methadone access, and 2) improve the availability of prescribers, addiction specialists, and mental health professionals via telehealth.

Section K outlines the first recommendation, increasing access to medication-assisted treatment (MAT). It follows by describing the importance of improving access to telehealth. Section L lends Rawlsian ethical support to these recommendations. Concluding arguments for Part III can be found in Section M.

K. Recommendations

a. Access to MAT

Studies clearly illustrate that the use of MAT, in tandem with counseling and behavioral therapies, is an effective treatment of opioid use disorders and can aid in sustaining recovery.[46] MAT is the most effective method of treating acute withdrawal syndromes (medically supervised withdrawal or detoxification), which can improve patient health and rehabilitation program participation.[47] The following section defines buprenorphine, methadone, and their positive

[46] "Information about MAT," *Center for Drug Evaluation and Research*, accessed April 8, 2023. https://www.fda.gov/drugs/information-drug-class/information-about-medication-assisted-treatment-mat
[47] Marc Schuckit, Treatment of Opioid-Use Disorders. Longo DL, 2016, http://dxdoiorgucsfidmoclcorg/101056/NEJMra1604339

effects; then, the section argues that barriers to MAT treatment in poor and rural communities should be removed.

Buprenorphine is an opioid partial agonist, meaning that it is an agonist which cannot completely activate a drug receptor in the brain. Therefore, while it produces effects like euphoria and respiratory depression, it can help wean a person off full opioid agonists (i.e., heroin).[48] Anyone with a DEA license can administer buprenorphine. To administer it, licensed practitioners must wait 12 to 18 hours after the patient used short-acting opioids (48 hours for long-acting opioids); otherwise, more intense withdrawal may happen. The 2023 removal of the X-Waiver, the "federal requirement for practitioners to submit a waiver" to prescribe OUD treatment medications, allows for the out-patient use of buprenorphine.[49] Therefore, once prescribed, FDA-approved buprenorphine products are available for pick-up in pharmacies across the United States.[50] Moreover, as withdrawal symptoms improve, patients' dosage can be gradually reduced until their body completely adjusts to the lack of opioids (at which point MAT can be stopped).[51]

Focusing on statistical effectiveness, data from the National Institute on Drug Abuse found that patients taking 16mg doses of buprenorphine (per day) were 1.82 times more likely to stay in drug treatment than those who were placebo-treated. Furthermore, a 14-week randomized clinical trial with 113 patients suffering from OUD (prescription dependence) found that

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[48] SAMHSA, *Buprenorphine,* https://www.samhsa.gov/medications-substance-use-disorders/medications-counseling-related-conditions/buprenorphine.
[49] SAMSHA, *Removal of DATA Waiver (X-Waiver) Requirement,* https://www.samhsa.gov/medications-substance-use-disorders/removal-data-waiver-requirement.
[50] Ibid.
[51] Schuckit, Treatment of Opioid-Use Disorders.

buprenorphine use decreased opioid-positive drug tests by over 14 percent.[52,53] There is abundant data that clearly illustrates the effectiveness of using buprenorphine to treat opioid use disorder.

Methadone, which is also a long-acting opioid agonist, blocks the effects of opioids and reduces craving and withdrawal.[54] Much like buprenorphine, patients using methadone can only do so via practitioner prescription (though the removal of the X-waiver does not include methadone, which is a Schedule II substance). Therefore, methadone treatment must be started in-person with a specially licensed practitioner (though a practitioner has the discretion to send home small doses of the medication). Overall, the nature of methadone prescription is more controlled than that of buprenorphine.

Statistically, studies find that methadone helped OUD sufferers relieve withdrawal symptoms; did not induce euphoria; and, upon cessation of chronic use, produced a milder (but longer duration) withdrawal syndrome.[55] The mean 1-year retention in treatment is 60%, but varies based on adherence to dosing practices; furthermore, psychosocial services and counseling may also improve treatment outcomes during the first 6 months of methadone use.[56] As with buprenorphine, there is clear data showing the effectiveness of methadone in treating OUD.

Given the effectiveness of MAT, it is crucial to make it accessible in all poor and rural communities.[57] Several recommendations that should be addressed include:

1. Enhance availability of MAT via Medicaid programs, decreased stigmatization, and broader buprenorphine and methadone training for practitioners.[58]

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[52] National Institute on Drug Abuse, "How Effective are medications to treat opioid use disorder," 2021.
[53] David Fiellin, et all, *Primary care-based buprenorphine taper vs maintenance therapy for prescription opioid dependence: a randomized clinical trial,* 2014.
[54] SAMHSA, *Buprenorphine.*
[55] Gavin Bart, *Maintenance medication for opiate addiction: the foundation of recovery*, 2012.
[56] Ibid,
[57] National Rural Health Association, "Treating the Rural Opioid Epidemic," Feb 2017.
[58] Ibid.

2. Incentivized use of mental health services in congruence with MAT treatment.[59]
3. Integrate substance abuse treatment and recovery services into all rural health providers.[60]

These recommendations will aid in the financial burden of treatment, the efficiency of treatment, and the prevention of OUD altogether. Nevertheless, each of these recommendations assumes access to healthcare is available. Understanding that this is not the case, the next section of this paper gives recommendations on how to increase the availability of healthcare physicians; specifically, through telehealth.

b. Telehealth

In order to increase access to MAT, and thus improve OUD outcomes, rural and poor counties must increase access to healthcare professionals. There are several different approaches commonly argued for; notably, mobile health care and telehealth. While it has drawbacks, the COVID-19 pandemic illustrated that telehealth could be the future of medical access.

Telehealth is a healthcare program for diagnosis, treatment, and supervision whereby the separation of doctors and patients by space is mediated through various information and communication technologies.[61] Through telehealth, medical consultations, remote patient monitoring, pre- and post-operative surgical planning, and more can take place.[62] In recent years, the use of telemedicine has increased exponentially. Specifically, in 2020, Medicaid spending in several states increased 15x the pre-pandemic levels.[63] This illustrates the popularity of telehealth is expanding, which is likely in part due to the fact that over 70% of rural residents report having access to broadband internet (though, it should be noted that this is lower than their

[59] Ibid.
[60] Ibid.
[61] Christophe Jobe, et al, *Introduction of Telemedicine in a Prehospital Emergency Care Setting*, International Journal of Telemedicine & Applications, accessed April 8, 2023.
[62] Ibid.
[63] U.S. Government Accountability Office, Telehealth in the Pandemic – How Has It Changed Health Care Delivery in Medicaid and Medicare?", 2022/.

urban and suburban counterparts).[64] Furthermore, studies find that telehealth use in rural communities is "associated with positive outcomes for patients and health care professionals."[65]

Given the positive outcomes associated with telehealth use, it is crucial to make telehealth widely available to poor and rural communities. This would be specifically beneficial for the administration of buprenorphine, which would be prescribed via a telehealth appointment and picked up at the nearest pharmacy (i.e., Walmart, CVS, Walgreens). To achieve this, it is recommended to extend and make permanent the telehealth flexibilities authorized in the Consolidated Appropriations Act of 2023. Some of these flexibilities include making it easier for providers to deliver telehealth services to Medicaid and Medicare patients, expanding the ability to prescribe controlled substances (i.e., buprenorphine), and extending access to rural telehealth services.[66]

While it is clear that telehealth has positive consequences, there are several arguments against it. The most popular is the increased taxpayer cost associated with Medicaid expansion. In 2014, Medicaid coverage expanded to "nearly all adults with incomes up to 138% of the Federal Poverty Level."[67] While this type of expansion does cause an increased burden on taxpayers, it is ethically required to insure the worst-off are as well-off as possible. This Rawlsian argument is expanded in Section L. Other arguments against telehealth reference internet access problems. For example, the internet is not available to the entire rural population; moreover, some residents with internet do not have strong enough networks to support video

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[64] Emily Vogels, "Some Digital Divides Persist between Rural, Urban, and Suburban America," 2021.
[65] Michael Butzner and Yendelela Cuffee, "Telehealth Interventions and Outcomes across Rural Communities in the United States: Narrative Review," 2021.
[66] HHS, "Policy Changes During the COVID-19 Public Health Emergency,"
[67] KFF, Status of State Medicaid Expansion Decisions, 2023. https://www.kff.org/medicaid/issue-brief/status-of-state-medicaid-expansion-decisions-interactive-map/#:~:text=The%20Affordable%20Care%20Act's%20(ACA,FMAP)%20for%20their%20expansion%20populations.

calling.[68] While these arguments are true, the problem does not lie in telehealth – it lies in internet access, a resource that is quickly expanding across the United States. Finally, the last argument against telehealth is that it has little utility in times of crisis. For example, a video chat with a physician will not save someone in immediate need of Naloxone to counteract an overdose. While this is true, the point of telehealth is not to substitute emergency services. Rather, it is to support primary care and addiction health care services.

L. Ethical Support

In choosing to take any action, the dignity of every person should be respected. It takes two things to respect one's dignity: 1) acknowledge that every person has fundamentally equal worth, and 2) recognize that worth is high. Understanding dignity is crucial to understanding what makes actions unethical. Philosopher John Rawls posits that to create a just society, theorists should imagine themselves in an initial position of equality. When gathered in this presumed position of equality, Rawls argues for using a moral reasoning method called the veil of ignorance, which would disable anyone from knowing who they were in society.[69] Under these circumstances, society would view an act as unjust if it violated principles that they, unbiased contractors, agreed to adopt. Given this, Rawls argues that society ought to live according to three principles unbiased contractors would agree to: basic liberties for all, fair equality of opportunity, and maximizing the primary social goods for everyone (especially the worst-off).[70] A Rawlsian approach is ethically convincing because it emphasizes the importance of making unbiased decisions. It encourages decision-makers to ask themselves what they would want if they did not know where they would end up in the lottery of birth; therefore, giving more

[68] Lois Ritter, "Benefits and Challenges of Telehealth in Rural Areas," 2022.
[69] John Rawls, *A Theory of Justice*. Belknap Press of Harvard University Press, 1999.
[70] Ibid.

credence to the experience of the worst-off in society *before* determining a course of action. Ultimately, this paper assumes something to be unjust if it violates any of the aforementioned Rawlsian principles.

Increased access to MAT (Option A, for simplicities sake) is justifiable because the alternative (Option B), non-medication-based therapies, is a scientifically inferior approach. Option B would fail against Rawlsian ethical standards in multiple ways. To begin, Option B fails to make the worst-off as well-off as Option A. This is to say, Option A maximizes primary social goods for poor and rural communities by increasing the opportunity for OUD remission. Furthermore, Option A does not violate anyone's basic liberties. For example, it does not impede political liberty, freedom of speech, or freedom of the person. Option A also does not violate fair equality of opportunity. In fact, it bolsters both of these things by increasing liberties and FEO for the worst-off (OUD users). As Part I explores, OUD strips users of their basic capabilities. In treating the illness via MAT, users can pursue personal liberties and opportunities in a way that would not be possible without the treatment. The ability MAT has to save and transform lives for the better outweighs the increased tax burden on tax-payers. For these reasons, increasing MAT is morally justifiable.

Increasing access to telehealth (Option A) to increase MAT access is also morally justifiable. As mentioned in Section K, the other option is mobile health care (Option B). As with the previous recommendation, Option B fails to make the worst-off as well-off as Option A. While Option B mitigates the transportation issue, it makes access to healthcare unreliable. For example, if a mobile clinic was in a different location than a patient needing MAT during withdrawal, the patient would be left without access to healthcare. In contrast, a patient with telehealth access would never run into this problem. Furthermore, Option A does not infringe on

basic liberties or violate fair equality of opportunity (for the same reasons as MAT treatment in the previous paragraph), making Option A the most morally justifiable choice. Using a Rawlsian perspective, it becomes clear how the recommendations are morally justifiable.

M. Part Three Conclusion

The opioid epidemic delivers crushing blows to poor and rural communities in the United States every single day. The epidemic has taken the lives of over a million people, and opioid-related overdoses are increasing in virtually every corner of the world. To address this problem in rural and poor counties, increased telehealth access in conjunction with increasing access to medication-assisted treatment must be prioritized – a morally justified action through the Rawlsian perspective.

IV: Conclusion

N. Final Thoughts

This paper argues that the Opioid Epidemic affects virtually every county in the United States and has particularly harsh impacts on the poor and rural members of society. Furthermore, this impact is in part due to the geographic isolation of hospitals, the overhead cost of running less-lucrative hospitals, and the high cost of healthcare for patients. Finally, these problems can be partially mitigated through increased access to MAT via increased access to telehealth services. This approach is morally justifiable through a Rawlsian moral argument.

The core of this argument rests on the importance of people. In a society wrecked with unjust inequalities, more must be done to lessen the plight of those around us. Going forward, it is important to value each person's dignity and act in accordance with that value.

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