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Compassion Fatigue in an Infodemic: A Physician's Duty to Treat in the Age of Misinformation

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COMPASSION FATIGUE IN AN INFODEMIC: A PHYSICIAN'S DUTY TO TREAT IN THE AGE OF MISINFORMATION

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ABSTRACT

This Note considers how misinformation has exacerbated the COVID-19 pandemic and the inevitable burden it has placed on the healthcare industry. It explores the intersection between a doctor's oath of ethics and their right to refuse care by uncovering the obligations that guide their decisions. Justice dictates that physicians provide care to all who seek it, and it is unconstitutional for a physician to refuse to treat patients based on race, ethnicity, gender, religion, or sexual orientation. Even if a patient's request is antithetical to a physician's personal beliefs, the unwavering duty to treat generally mandates that physicians treat any patient who has requested his or her services. However, given the way that misinformation and disinformation has aggravated the COVID-19 pandemic, resulting in countless preventable hospitalizations and deaths, this Note will unearth the physical and emotional toll the infodemic has taken on healthcare professionals, explore available remedies to them, and endorse a holistic response modeled upon the collective good.

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I. INTRODUCTION

With ever-evolving technology comes expedited means of communication. With communication, however, comes an exchange of free-flowing, uninhibited, and unverified discourse. Herein lies the issue of misinformation: a pervasive phenomenon that uses inaccurate claims or depictions to influence the attitudes and behaviors of those who discover it.[1] Given its sweeping nature, misinformation has penetrated nearly every aspect of society, being largely intensified by social media giants that regulate the daily digital intake of their 3.78 billion users.[2] The proliferation of misinformation on public opinion is considerable, and its effects are especially evident in the realm of health-related misinformation as it pertains to the COVID-19 pandemic that began in March 2020.[3]

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[1] Zara Abrams, *Controlling the spread of misinformation*, AM. PSYCH. ASS'N (Mar. 1, 2021), https://www.apa.org/monitor/2021/03/controlling-misinformation.

[2] *Number of social media users worldwide from 2017 to 2027*, STATISTA, https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users (last visited Oct. 22, 2021).

[3] Kathy Katella, *Our Pandemic Year—A COVID-19 Timeline*, YALE MED. (Mar. 9, 2021), https://www.yalemedicine.org/news/covid-timeline.

Various falsehoods continually influenced the public's perception of protective measures during the pandemic and even lead some to believe the virus itself was a "hoax," despite obtaining positive test results.[4] In fact, misinformation became so rampant that the World Health Organization (WHO) declared a parallel "infodemic" surrounding COVID-19 to describe the magnitude of "fake news" and its impact on efforts to limit the virus's spread.[5] In addition to aggravating infection, morbidity, and mortality rates, one often overlooked implication is the effect these falsities have on healthcare workers such as doctors and nurses who must balance dramatic surges of infected patients against reports denying the pandemic's very existence. Additionally, with the development and widespread distribution of the COVID-19 vaccines, misinformation has frustrated efforts to stop the virus's spread by fueling public skepticism, thus reinforcing the virus's grip on society and demanding healthcare workers' unconditional duty to treat.

A physician's duty is a cornerstone of medical ethics. It dictates that physicians may not decline to treat patients because of any basis that would constitute "invidious discrimination."[6] It ensures that the federal protected classes, including race, religion or creed, national origin or ancestry, sex, age, and citizenship remain safeguarded from prejudicial motives. Although this is a novel issue, the unvaccinated are likely not considered a protected class.[7] Therefore, physicians suffering from compassion fatigue as a result of COVID-19 misinformation may legally be able to refuse treatment to

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[4] Paulina Villegas, *South Dakota nurse says many patients deny the coronavirus exists — right up until death*, WASH. POST (Nov. 16, 2020, 5:22 PM), https://www.washingtonpost.com/health/2020/11/16/south-dakota-nurse-coronavirus-deniers.

[5] Abrams, *supra* note 1.

[6] *AMA Code of Medical Ethics' Opinion on Respect for Patient Beliefs*, AM. MED. ASS'N J. ETHICS, https://journalofethics.ama-assn.org/article/ama-code-medical-ethics-opinion-respect-patient-beliefs/2009-10 (last visited Oct. 22, 2021).

[7] Lisa Nagele-Piazza, *Can Employers Have Separate Policies Based on Vaccination Status?*, SOC'Y FOR HUM. RES. MGMT. (June 25, 2021), https://www.shrm.org/resourcesandtools/legal-and-compliance/employment-law/pages/separate-policies-based-on-vaccination-status.aspx (stating that "[v]accination status is not a protected category under federal or most state anti-discrimination laws," but adding that "Montana recently became the first state to ban workplace discrimination based on immunization status . . . .").

unvaccinated patients. However, is it ethical? If not, are there other options?

The ethics behind a decision to refuse treatment to unvaccinated patients is hotly contested, but many physicians are privy to this dispute's existence often long before they are confronted by it. As such, medical professionals tend to proceed anyway, knowing the quagmires they may become entangled with but continuing to practice in the interest of collective health. In Part II, this Note will explore the physician's duty to treat at length, including the Hippocratic Oath healthcare workers adhere to; physician sentiment with respect to this pledge; and doctor-patient relationships. Part III will explore health-related misinformation and disinformation, their origins and subsequent developments, and social media's role in their proliferation. Additionally, it will explain the undeniable effect of misinformation on the COVID-19 pandemic and the healthcare industry specifically. In Part IV, this Note will explain the concepts of physician burnout and compassion fatigue while also exploring potential remedies for burnout in healthcare workers. Part V will consider the constitutional jurisprudence at issue in global health crises when balancing individual choice and public health, and it will discuss the extent of a physician's ethical and social responsibility to treat patients unconditionally. Finally, Part VI will propose solutions to the rampant misinformation on social media platforms and seek to hold major providers accountable.

II. A PHYSICIAN'S DUTY TO TREAT

A. The Patient-Physician Relationship

The patient-physician relationship is premised on a fundamental respect for law and human rights. It is a moral activity arising from the imperative to care for patients and alleviate suffering, and it champions trust, confidentiality, and unconditional concern.[8] This basis of trust "gives rise to physicians' ethical responsibility to place patients' welfare above the physician's own

[8] *Patient-Physician Relationships*, AM. MED. ASS'N CODE MED. ETHICS, https://www.ama-assn.org/delivering-care/ethics/patient-physician-relationships (last visited Oct. 22, 2021).

self-interest or obligation to others, to use sound medical judgment on patients' behalf, and to advocate for their patients' welfare."[9] Generally, the relationship is entered into by mutual consent when a physician serves a patient's medical needs; however, there exist limited circumstances where a patient-physician relationship may be created without the patient's express agreement.[10] Such circumstances include when a physician provides emergency care or care at the request of the patient's treating physician; when a physician provides medically appropriate care for a prisoner under court order; or when a physician examines a patient in the context of an independent medical examination, in which case a limited relationship exists.[11]

Despite the lack of explicit assent in some relationships, *all* circumstances require that the physician act in keeping with ethics guidance.[12] Such guidance, set forth by the American Medical Association's Journal of Ethics, maintains that both physicians and patients are free to enter into or decline any relationship.[13] However, a physician who offers their services to the public "may not decline to accept patients because of race, color, religion, national origin, sexual orientation, gender identity, or any other basis that would constitute invidious discrimination."[14] This obligation encompasses a physician's legal and ethical duty to treat whomever the patient may be once a patient-physician relationship has been established.

B. The Hippocratic Oath

A physician's duty is further exemplified in the Hippocratic Oath, an ethical code adopted as "a guide to conduct by the medical profession" that is recited in many medical school graduation ceremonies still today.[15] A fragment of this code has been handed

[9] *Id.*
[10] *Id.*
[11] *Id.*
[12] *Id.*
[13] *Id.*
[14] *AMA Code of Medical Ethics' Opinion on Respect for Patient Beliefs*, *supra* note 6.
[15] *Hippocratic oath*, BRITANNICA, https://www.britannica.com/topic/Hippocratic-oath (last visited Oct. 22, 2021).

down in various versions through generations of physicians as it dictates physicians' obligations to students of medicine and "the duties of pupil to teacher."[16] In the Oath, the physician pledges "to prescribe only beneficial treatments, according to his abilities and judgment; to refrain from causing harm or hurt; and to live an exemplary personal and professional life."[17] The text of this Oath dates back to *c.* 400 BC; as such, its classical version differs from contemporary versions, which are reviewed and revised frequently to conform to changes in modern medical practice.[18]

The modern version of the Oath, written in 1964, is read by nearly 100% of U.S. medical schools today.[19] Yet paradoxically, a growing number of physicians feel that the Hippocratic Oath is insufficient to address the realities of a medical world that has witnessed "huge scientific, economic, political, and social changes, a world of legalized abortion, physician-assisted suicide, and pestilences unheard of in Hippocrates' time."[20] Some physicians see oath-taking as no more than a "pro-forma ritual with little value beyond that of upholding tradition" and argue that it should be radically modified or abandoned altogether.[21] Others, however, have taken an alternative approach.

In addition to reciting the modern, arguably out-of-touch version of the Oath, members of the University of Pittsburgh School of Medicine's Class of 2024 penned their own to acknowledge their ever-evolving responsibilities as physicians and encompass modern issues like the COVID-19 pandemic, healthcare disparities, and racial injustice.[22] Among other things, the new Oath honors the "700,000+ lives lost to COVID-19, despite the sacrifices of healthcare workers,"[23]

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[16] *Id.*
[17] *Id.*
[18] *Id.*
[19] Peter Tyson, *The Hippocratic Oath Today*, PBS (Mar. 27, 2001), https://www.pbs.org/wgbh/nova/article/hippocratic-oath-today.
[20] *Id.*
[21] *Id.*
[22] *Modern-Day Hippocrates: Incoming School of Medicine Students Write Their Own Oath*, UNIV. PITTSBURGH (Sept. 11, 2020), https://www.pitt.edu/pittwire/features-articles/modern-day-hippocrates-incoming-school-medicine-students-write-their-own-oath.
[23] *Id.* (internal quotations omitted).

and recognizes the "fundamental failings of our health care and political systems in serving vulnerable communities."[24] It calls on each physician to pledge to "eliminate their personal biases, combat disinformation to improve health literacy and be an ally to minorities and other underserved groups in society."[25] This new Oath is both timely and timeless as it acknowledges the modern challenges incoming physicians face and re-emphasizes the healthcare industry's sense of mission and unwavering ethics in the age of misinformation.

C. Physicians' Legal and Ethical Duty to Treat

A physician's duty to treat is essentially an undertaking to "advise and treat" their patient with reasonable skill and care; not abandon their patient once a relationship has been established; and, in some jurisdictions, not provide treatment that would not be in the patient's best interest and would provide no benefit.[26] This duty is defined generally by the body of law that regulates patient-physician relationships as few jurisdictions have specific legislative provisions dedicated to the duty of doctors to treat, posing unique issues with respect to pandemic diseases.[27] The legal and ethical duty of a doctor to treat during a pandemic has evolved over time, particularly as a result of the 2003 SARS outbreak and September 11th terrorist attacks. Since then, legislation and ethical guidance have erupted to address the tension between beneficence, the ethical obligation to

[24] *Id.* As of the time of writing in February 2022, the number of COVID-19 deaths in the U.S. has now surpassed 900,000. Julie Bosman & Mitch Smith, *U.S. Covid Death Toll Surpasses 900,000 as Omicron's Spread Slows*, N.Y. TIMES (Feb. 4, 2022), https://www.nytimes.com/2022/02/04/us/us-covid-deaths.html.

[25] Sarah Boden, *A New Hippocratic Oath Asks Doctors To Fight Racial Injustice And Misinformation*, NPR (Nov. 4, 2020, 11:14 AM), https://www.npr.org/sections/health-shots/2020/11/04/929233492/a-new-hippocratic-oath-asks-doctors-to-fight-racial-injustice-and-misinformation.

[26] Cristina Pelkas & Matthew Boisseau, *Unmasked: A comparative analysis of the physician's ethical and legal duty to treat during a pandemic*, 20 MED. L. INT'L 211, 214 (2020).

[27] *Id.*

prioritize the patient's best interests, and healthcare workers' autonomy during dangerous situations.[28]

Following the September 11th terrorist and anthrax letter attacks, the U.S. Centers for Disease Control and Prevention (CDC) commissioned the Model State Emergency Health Powers Act (MSEHPA) with a view towards updating states' public health legislation.[29] Specifically, Section 608(a) of the Act empowers states to enforce a conditional requirement to retaining medical licensure: treating patients during a declared public health emergency.[30] Although this provision has been adopted by only a handful of states, some, such as Maryland, have gone a step further, imposing criminal liability on healthcare providers who refuse to participate in "surveillance, treatment, and suppression efforts."[31] To be sure, the most troubling aspect of section 608(a) of the MSEHPA and its progeny is its lack of protection of Fourteenth Amendment due process rights, particularly for healthcare providers prior to the enactment of the direction or order to treat. Nevertheless, most countries do not impose a specific legal duty to treat during a pandemic; the duty to treat is fundamentally contractual and therefore ends upon termination of said contract.[32]

Alternatively, some specific legislative provisions that all jurisdictions must implement include forms of anti-discrimination legislation, which work to protect patients from discriminatory treatment by healthcare workers based on grounds of disability. Many of these provisions expressly include as a disability "the presence in the body of organisms capable of causing disease," and viral diseases such as HIV/AIDS have historically been considered qualifying disabilities.[33] Inherent in these legislative schemes are defenses of relevance to a pandemic, though they vary greatly internationally. The Australian Disability Discrimination Act, for example, permits disability discrimination where said disability is "an infectious disease and the discrimination is reasonably necessary

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[28] *Id.* at 217.
[29] *Id.* at 215.
[30] *Id.*
[31] *Id.*
[32] *Id.*
[33] *Id.* at 216 (internal quotations omitted).

to protect public health," thus providing physicians a general defense of "unjustifiable hardship."[34] Under this Act, where providing services would "pose a direct threat to the health or safety of others, being a significant risk . . . that cannot be eliminated by the modification of policies, practices or procedures," a defense exists to shield providers who deny care to patients.[35]

In the United States, on the other hand, the Americans with Disabilities Act (ADA) does not deem the presence of organisms in the body capable of causing disease as a form of disability; however, it does maintain that "[i]f an individual with a disability poses a direct threat despite reasonable accommodation, he or she is not protected by the nondiscrimination provisions of the ADA."[36] Under the ADA, a "direct threat" is defined as a "significant risk of substantial harm to the health or safety of the individual or others that cannot be eliminated or reduced by reasonable accommodation."[37] This assessment must be based on objective, factual information, and generally follows the four factors identified by the Equal Employment Opportunity Commission (EEOC): (1) the duration of the risk; (2) the nature and severity of the potential harm; (3) the likelihood that potential harm will occur; and (4) the imminence of the potential harm.[38] Thus, "direct threat" is an important ADA concept, especially during an influenza or coronavirus pandemic where the level of threat varies depending on the severity of the illness.[39] As of March 2020, the EEOC issued guidance indicating that the highly contagious and potentially fatal nature of COVID-19, which led to numerous closure orders and masking requirements due to the risk of contagion, manifestly supported a finding that the COVID-19 pandemic met the direct threat standard.[40]

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[34] *Id.*
[35] *Id.* (internal quotations omitted).
[36] *Pandemic Preparedness in the Workplace and the Americans with Disabilities Act*, U.S. EQUAL EMP. OPPORTUNITY COMM'N (Oct. 9, 2009), https://www.eeoc.gov/laws/guidance/pandemic-preparedness-workplace-and-americans-disabilities-act.
[37] *Id.*
[38] *Id.*
[39] *Id.*
[40] *Id.*

Finally, from the contractual patient-physician relationship comes a number of ethical duties, stemming largely from the Hippocratic Oath. In every jurisdiction, these duties are enshrined in various codes of conduct by medical organizations, which build upon the general duty of beneficence towards patients.[41] Beneficence is a concept in research ethics that encompasses a moral obligation to act in the patient's best interests; it manifests as a physician's duty to promote patient welfare and place patients' interests above their own—subject to some important limitations.[42] Failure to act upon this obligation of beneficence generally does not result in legal penalty because it imposes a standard far beyond the reasonable expectations of an ordinary citizen, reflecting the Western legal and philosophical tradition of respect for individual autonomy.[43] Still, however, beneficence holds physicians to a higher ethical standard than would normally be demanded of an individual. While doctors may receive reciprocal benefits for their work like financial remuneration, respect from society, and subsidized medical training, it is imperative to note that they accept a high degree of risk in their daily work, including a persistent risk of infection.[44]

The duty to treat during a pandemic is specifically addressed in ethical codes of conduct.[45] As discussed above, these codes do not have the force of binding legislation or common law; rather, they work to provide ethical guidance for healthcare workers and lay out public expectations in times of crises. Still, however, adherence or a lack thereof to these codes can be used as evidence of appropriate professional conduct in professional disciplinary proceedings and may result in potentially detrimental sanctions to medical professionals and their license to practice.[46] Following the September 11th attacks, the American Medical Association (AMA) reemphasized physicians' commitments to care for the sick or injured and imposed an obligation to provide "'urgent medical care' during a disaster, even in the face of 'greater than usual risks to physicians' own safety,

[41] Pelkas & Boisseau, *supra* note 26, at 217.
[42] *Id.*
[43] *Id.*
[44] *Id.*
[45] *Id.*
[46] *Id.*

health, or life.'"[47] This obligation mirrors that set out in the International Code of Medical Ethics, which provides that a "physician shall give emergency care as a humanitarian duty," and is balanced against the physician's personal safety, skills, competence, and the potential availability of other care options.[48]

These ethical codes are designed to reflect the minimum standards of behavior accepted within the medical field and demonstrate the professional consensus of healthcare workers with respect to their principled duties. In the United States, only 20% of senior physicians reported that they would be unwilling to care for patients "in a bioterrorism attack with an unknown but potentially lethal illness," illustrating that the vast majority of physicians feel they would personally report for duty in response to a pandemic.[49] In fact, 55% of physicians acknowledge their "obligation to care for patients in epidemics even if doing so endangers the physician's health."[50] Interestingly, however, a study conducted in the United Kingdom indicated that 82% of healthcare workers believed there should be no penalty for failure to work during a pandemic, which speaks again to the dichotomy between unconditional care and individual autonomy.[51] Thus, the ethical and professional consensus supports accepting a degree of risk in order to continue treating patients while recognizing the individual doctor's autonomy and urging that legal consequences not attach to a refusal to accept such risk.

Competing considerations between a physician's duty to their own health and that of their families, future patients, and the public may counterbalance their ethical commitment to the individual patient. Although the professional medical consensus unquestionably accepts a degree of danger even in the face of significant personal risk, efforts to create a safe workplace that minimizes this risk should be highly prioritized. Therefore, society should consider adopting other measures to acknowledge the sacrifice of frontline healthcare workers. Individuals who continue working during a pandemic

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[47] *Id.* at 218.
[48] *Id.*
[49] *Id.* at 219.
[50] *Id.*
[51] *Id.*

should be acknowledged by society with, among other things, accessible worker's compensation, alternative accommodation, hazard pay, and student debt forgiveness.[52] By implementing these protective measures, healthcare workers may continue to serve patients, answering far beyond the call of duty even when rampant misinformation obstructs medical progress.

III. THE EFFECT OF MISINFORMATION ON COVID-19

False and misleading information experienced an exponential surge in 2020 following unprecedented news events, hostile political divides, and polarized news streams.[53] Through misinformation[54] and disinformation,[55] patently inaccurate news is shared with hundreds within seconds, largely via the Internet. The key distinction between misinformation and disinformation is intent: although both words refer to false information, only disinformation is deliberately untrue.[56] Together, these concepts have manifested in conspiracy theories, propaganda, deepfakes, fake news, hoaxes, and more, aggravating the effects of the COVID-19 pandemic and producing what was deemed an "infodemic" by the WHO.[57] The infodemic had been largely propagated by social media and its lax or arguably

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[52] *Id.* at 211.

[53] Amy Mitchell et al., *Misinformation and competing views of reality abounded throughout 2020*, *in* HOW AMERICANS NAVIGATED THE NEWS IN 2020: A TUMULTUOUS YEAR IN REVIEW 1, 21 (2021).

[54] *See "Misinformation" vs. "Disinformation": Get Informed On The Difference*, DICTIONARY.COM (Aug. 15, 2022), https://www.dictionary.com/e/misinformation-vs-disinformation-get-informed-on-the-difference (Misinformation is a broad term for any kind of wrong or false information. Intent, whether one knowingly spreads these falsities, is irrelevant.).

[55] *See id.* Disinformation is defined more generally as "deliberately misleading or biased information; manipulated narrative or facts; propaganda." It is *knowingly* spreading misinformation, thus creating a very powerful, destructive, and divisive tool commonly utilized in espionage. In fact, countries often have an interest in intentionally spreading inaccurate information to their rival nations, usually through what is called a "disinformation campaign." *Id.*

[56] *Id.*

[57] *See id.*; *see also The COVID-19 infodemic*, WORLD HEALTH ORG., https://www.who.int/health-topics/infodemic/the-covid-19-infodemic#tab=tab_1 (last visited Oct. 22, 2021).

nonexistent policies meant to safeguard the public from misinformation and disinformation. As a result, the healthcare industry was left to tend to the thousands of unnecessary and preventable consequences of the infodemic, placing a heavy burden on an already-consumed field.

A. Social Media's Role in COVID-19 Misinformation and Disinformation

Digital technology has forever changed the way society communicates, builds relationships, and shares knowledge. With over 4.48 billion social media users worldwide, the unchecked information circulating in these digital spaces has the power to exert influence and persuade people simply by being viewed at the right or wrong time.[58] Additionally, because more user time spent on an application translates directly into more advertising revenue, social media companies constantly seek to maximize their user engagement.[59] To achieve these ends, companies like Instagram, Facebook, Twitter, and Reddit utilize machine learning algorithms that identify users' interests based on their data and habits, find "high-engagement content in the same ilk," and insert it into users' feeds.[60] For these social media giants, "a click is a win, no matter the content."[61]

In short, sensationalism sells. In a study conducted by Oxford University, an analysis of Facebook data indicated that "junk news," or content from less reputable sources, is shared four times more than content from reputable, trusted news outlets.[62] This "junk news"

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[58] *See* Brian Dean, *Social Network Usage & Growth Statistics: How Many People Use Social Media in 2022?*, BACKLINKO (Oct. 10, 2021), https://backlinko.com/social-media-users.

[59] CTR. FOR COUNTERING DIGIT. HATE, MALGORITHM: HOW INSTAGRAM'S ALGORITHM PUBLISHES MISINFORMATION AND HATE TO MILLIONS DURING A PANDEMIC 4 (2021).

[60] *Id.*

[61] *Id.*

[62] Andrew Hutchinson, *New Study Shows that Misinformation Sees Significantly More Engagement than Real News on Facebook*, SOC. MEDIA TODAY (May 22, 2019), https://www.socialmediatoday.com/news/new-study-shows-that-misinformation-sees-significantly-more-engagement-than/555286.

included various forms of propaganda and "ideologically extreme, hyper-partisan, or conspiratorial news and information."[63] Per the report, these sources run on disinformation, publishing "misleading, deceptive, or incorrect information purporting to be real news about politics, economics, or culture."[64] Regrettably, however, many would still argue that this content is, in fact, accurate news and it is the mainstream outlets that publish lies.[65] This study indicates why this type of content is so effective, especially on Facebook: it aligns with our internal biases and reinforces established viewpoints, resulting in a surefire way to boost engagement and reaffirm the power of confirmation bias.[66] According to psychologist and author Sia Mohajer, "[w]e look for evidence that supports our beliefs and opinions about the world, but excludes those that run contrary to our own."[67]

Cognitive biases, however, are not the only contributing factor to the infodemic. Despite purporting to remain neutral, social media's role in the proliferation of misinformation and disinformation is palpable. In a report titled "Malgorithm," the Center for Countering Digital Hate[68] (CCDH) revealed the way Instagram's algorithm actively pushes radicalizing, extremist misinformation to its users.[69] To reiterate, this is a purposeful tactic used to boost consumer interactions: it encourages users to view extreme material and, once hooked, proceeds to "cross-fertilize[]" the content with that from "other limbs of the radical worldview."[70] The

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[63] *Id.*
[64] *Id.*
[65] *Id.*
[66] *Id.*
[67] *Id.*; *see also* Peter Dizikes, *Study: On Twitter, false news travels faster than true stories*, MASS. INST. TECH. (Mar. 8, 2018), https://news.mit.edu/2018/study-twitter-false-news-travels-faster-true-stories-0308 (finding that false news stories on Twitter are 70% more likely to be retweeted than true stories, and true stories take about six times as long to reach 1,500 people than false stories do to reach the same audience).
[68] The CCDH is an international not-for-profit NGO that seeks to disrupt the architecture of online hate and misinformation by campaigning for big tech firms to stop providing services to individuals who may promote hate and misinformation, including neo-Nazis and anti-vaccine advocates. CTR. FOR COUNTERING DIGIT. HATE, *supra* note 59.
[69] *Id.*
[70] *Id.*

CCDH offered an example of this process, revealing that users who follow "anti-vaxxers," or those opposed to vaccination, on social media are fed QAnon conspiracies and antisemitic hate and, if they engage with the conspiracies, are then fed electoral and anti-vaccine misinformation.[71] Social media plays a massive role in the indoctrination of individuals by feeding the fire and pushing equally inaccurate or inflammatory material to users once some degree of engagement is measured, rather than publishing accurate, life-saving information, especially during public health emergencies.

Ultimately, however, despite social media platforms' role in the distribution of misinformation and their lax policies and efforts to regulate the spread, these platforms are largely user-driven. As public arenas, networks like Instagram and Facebook may push certain incendiary posts more than others; however, it is users who initially create and share them, typically for their own financial or social gain. One notable group of individuals contributing to the COVID-19 infodemic is what the CCDH has termed the "Disinformation Dozen."[72] This group consists of twelve anti-vaccine activists on Facebook, YouTube, Instagram, and Twitter who lack relevant medical expertise but actively spread misinformation about the safety of vaccines and the threat of COVID-19 to more than 59,000,000 followers collectively.[73] Although this group's function clearly violates the policies purportedly implemented by Facebook, Google, and Twitter, platforms have failed to satisfactorily enforce those policies, leaving social media largely unrestrained.

An analysis of anti-vaccine content posted to Facebook nearly 700,000 times in two months revealed that up to 73% of that content originated with members of the Disinformation Dozen.[74] Similarly, 65% of anti-vaccine content posted on Facebook and Twitter 812,000 times between February to March 2021 was attributable to the

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[71] *Id.*

[72] CTR. FOR COUNTERING DIGIT. HATE, THE DISINFORMATION DOZEN: WHY PLATFORMS MUST ACT ON TWELVE LEADING ONLINE ANTI-VAXXERS 5 (2021), https://counterhate.com/wp-content/uploads/2022/05/210324-The-Disinformation-Dozen.pdf.

[73] *Id.*

[74] *Id.*

group.[75] Despite repeatedly violating social media platforms' terms of service agreements, nine of the Dozen remain on all three platforms (Facebook, Instagram, and Twitter), while only three have been comprehensively removed from just one network.[76] In fact, another study conducted by the CCDH revealed that platforms fail to act on 95% of the COVID-19 and vaccine misinformation reported to them.[77] This is a clear extension of social media platforms' conscious failure to act on COVID-19 misinformation, thus exacerbating the pandemic and healthcare workers' increasing fatigue.

B. The Infodemic's Effect on the Healthcare Industry

The WHO has adamantly warned governments and organizations about the COVID-19 infodemic and how the dissemination of misinformation damages national and global biosecurity. During a disease outbreak, too much false or misleading information in digital and physical environments causes confusion and risk-taking behaviors that can harm health and lead to mistrust in health authorities, thereby undermining the public health response.[78] An infodemic can intensify or lengthen outbreaks when people are unsure whom to trust when it comes to protecting their health and the health of people around them.[79] This concept became especially prevalent following the creation and distribution of the COVID-19 vaccines as researchers continuously connected misinformation disseminated via social media to increased vaccine hesitancy.[80] Such hesitancy resulted in multiple preventable deaths and an overwhelming wave of infected patients seeking medical care or advice from healthcare workers, despite providers' pleas to vaccinate and stop the spread.

Vaccines have long been regarded as a cost-effective public health preparedness tool, playing an instrumental role in the prevention of outbreaks of infectious diseases and the response to

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[75] *Id.*
[76] *Id.*
[77] *Id.*
[78] *The COVID-19 infodemic*, *supra* note 57.
[79] *Id.*
[80] CTR. FOR COUNTERING DIGIT. HATE, *supra* note 59.

ongoing outbreaks.[81] Recent estimates from the WHO indicate that vaccination in general prevents between two and three million deaths per year across the globe and has contributed to the eradication or near-eradication of many devastating diseases.[82] Recently, however, wavering trust in health technologies like vaccines has become one of the most significant contributing factors towards declining vaccination rates and the increasing persistence of vaccine-preventable diseases. In 2019, the WHO added vaccine hesitancy to the list of the top ten threats to global health, noting that the "reluctance or refusal to vaccinate despite the availability of vaccines" significantly hampers their deployment as effective public health tools.[83]

Nevertheless, misinformation's effect on the healthcare industry persisted long before the December 2020 emergency authorization of COVID-19 vaccines, which came nine months after the WHO declared COVID-19 a pandemic.[84] According to Cornell University, one unavoidable denominator existed between coronavirus misinformation, conspiracy theories, and falsehoods: former President Donald Trump.[85] In analyzing 38 million articles about the pandemic in English-language media around the world, the study found that nearly 38% of the overall "misinformation conversation" involved Trump, making him the "largest driver of the 'infodemic.'"[86] The comprehensive analysis identified eleven topics of misinformation, including several conspiracies such as one that suggested the "pandemic was manufactured by Democrats to coincide with Trump's impeachment trial and another that purported to trace the outbreak in Wuhan, China, to people who ate bat soup."[87] The most prevalent topic of misinformation, however, was "miracle

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[81] Ana Santos Rutschman, *Social Media Self-Regulation and the Rise of Vaccine Misinformation*, 4 U. PA. J. L. & INNOVATION 25, 30 (2022).
[82] *Id.*
[83] *Id.* at 32.
[84] Katella, *supra* note 3.
[85] Sheryl Gay Stolberg & Noah Weiland, *Study Finds 'Single Largest Driver' of Coronavirus Misinformation: Trump*, N.Y. TIMES (Oct. 6, 2021), https://www.nytimes.com/2020/09/30/us/politics/trump-coronavirus-misinformation.html.
[86] *Id.*
[87] *Id.*

cures," which "accounted for more misinformation than the other ten topics combined."[88] By promoting anti-malarial drugs, disinfectants, and ultraviolet light as potential treatments for COVID-19, former President Trump contributed to the creation of more than 30,000 articles on "miracle cures" alone.[89]

Public health experts maintain that the foundation of an effective response to an outbreak of infectious disease is clear, concise, and accurate information, especially in the absence of treatments or vaccines.[90] This, according to Dr. Joshua Sharfstein of Johns Hopkins Bloomberg School of Public Health, is "what we need to save lives . . . If it's not done well, you get far more infections and deaths."[91] The U.S. accounts for less than 5% of the world's population but more than 20% of the deaths reported during the pandemic.[92] Misinformation and disinformation surrounding the pandemic is "'one of the major reasons' the United States is not doing as well as other countries" in combatting the spread and a large contributor to the more than 800,000 deaths in the U.S. alone—the

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[88] *Id.*

[89] *Id. See* Libby Cathey, *Timeline: Tracking Trump alongside scientific developments on hydroxychloroquine*, ABC NEWS (Aug. 8, 2020, 8:12 AM), https://abcnews.go.com/Health/timeline-tracking-trump-alongside-scientific-developments-hydroxychloroquine/story?id=72170553 (Trump embraces hydroxychloroquine.); Katie Rogers et al., *Trump's Suggestion That Disinfectants Could Be Used to Treat Coronavirus Prompts Aggressive Pushback,* N.Y. TIMES (Apr. 24, 2020), https://www.nytimes.com/2020/04/24/us/politics/trump-inject-disinfectant-bleach-coronavirus.html (Trump contends that an "injection inside" the body with a disinfectant like bleach or isopropyl alcohol could help combat the virus.); Ian Richardson, *Fact check: COVID-19 UV light treatment is being studied – not yet in use – in Los Angeles,* USA TODAY (May 4, 2020, 3:22 PM), https://www.usatoday.com/story/news/factcheck/2020/05/02/fact-check-covid-19-uv-light-treatment-research-underway-los-angeles/3053177001 (Trump floats the idea that ultraviolet light could be used in the body as a treatment.).

[90] Stolberg & Weiland, *supra* note 85.

[91] *Id.*

[92] Tommy Beer, *Trump Is 'Single Largest Driver' Of Covid-19 Misinformation, Cornell Study Finds*, FORBES (Oct. 1, 2020, 3:23 PM), https://www.forbes.com/sites/tommybeer/2020/10/01/trump-is-single-largest-driver-of-covid-19-misinformation-cornell-study-finds/?sh=514b56e76d70.

most of any country.[93] By harming the credibility of health professionals who are trusted sources of information for their patients and the public, disinformation egregiously undermined public health efforts and compounded healthcare workers' existing obstacles, including a lack of adequate personal protective equipment (PPE) and crises-level shortages of beds and staff.[94] People with unsubstantiated or disproven ideas about the pandemic find platforms to spread them, and the number of cases, hospitalizations, and deaths inevitably increases. Now, healthcare workers are forced to fight both disinformation and COVID-19, prompting the AMA to adopt a policy urging social media companies to further strengthen their content moderation related to medical and public health misinformation and remain vigilant against the proliferation of inaccurate news on their platforms.[95]

IV. MENTAL HEALTH AS A MEDICAL PROFESSIONAL

A. Physician Burnout and Compassion Fatigue

Healthcare professionals now more than ever are being revered for their selflessness and compassion as frontline workers in the deadliest pandemic in U.S. history.[96] However, after nearly two years and over 800,000 lives lost as of January 2022, COVID-19 has placed an insurmountable amount of stress on physicians and other health professionals.[97] Between May 28 and October 1, 2020, forty-

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[93] Stolberg & Weiland, *supra* note 85; *see COVID-19 Projections: Cumulative deaths*, INST. FOR HEALTH METRICS & EVALUATION, https://covid19.healthdata.org/united-states-of-america (last visited Dec. 27, 2021).

[94] Reed Abelson, *Covid Overload: U.S. Hospitals Are Running Out of Beds for Patients*, N.Y. TIMES (Sept. 22, 2021), https://www.nytimes.com/2020/11/27/health/covid-hospitals-overload.html.

[95] Press Release, AMA, AMA adopts policy to combat disinformation by health care professionals (Nov. 15, 2021), https://www.ama-assn.org/press-center/press-releases/ama-adopts-policy-combat-disinformation-health-care-professionals.

[96] Amy McKeever, *COVID-19 surpasses 1918 flu as deadliest pandemic in U.S. history*, NAT'L GEOGRAPHIC (Sept. 21, 2021), https://www.nationalgeographic.com/history/article/covid-19-is-now-the-deadliest-pandemic-in-us-history.

[97] Sara Berg, *Half of health workers report burnout amid COVID-19*, AMA (July 20, 2021), https://www.ama-assn.org/practice-management/physician-health/half-health-workers-report-burnout-amid-covid-19; Sharona Hoffman, *Healing the Healers:*

two healthcare organizations across the U.S. assessed their workers' mental health during the pandemic, and their findings indicated what many have called its own epidemic, pandemic, and public health crisis.[98] Upon surveying over 20,000 physicians and other workers, 61% felt "high fear of exposing themselves or their families to COVID-19," 38% self-reported feelings of anxiety or depression, 43% suffered from work overload, and 49% experienced burnout.[99] Stress scores were highest among nursing and medical assistants, social workers, and inpatient workers such as nurses, as well as among women, Black, and Latino healthcare workers.[100]

COVID-19 has presented unique challenges, leading to a stark increase in mental health issues in the medical field, but burnout among healthcare workers is not a newly recognized phenomenon.[101] In a 2018 *New York Times* article, Dr. Abraham Verghese discussed a "disease" affecting an increasing number of his colleagues.[102] He recalls an encounter with a young physician experiencing what he described as "existential despair" in "what should be the honeymoon of a career."[103] This sentiment, commonly known as "burnout" or "physician burnout," has increasingly become an acute concern in the medical community.[104] Burnout is a syndrome characterized by emotional exhaustion, depersonalization, and dissatisfaction with one's work accomplishments, and it is associated with high rates of anxiety, depression, and substance abuse.[105] Statistically, odds of burnout are 40% lower in workers who feel valued by their organizations, and interventions aimed at increasing feelings of being valued may be particularly beneficial.[106] However, without the

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Legal Remedies for Physician Burnout, 18 YALE J. HEALTH POL'Y, L., & ETHICS 56, 59 (2019).

[98] Berg, *supra* note 97.

[99] *Id.*

[100] *Id.*

[101] Kriti Prasad et al., *Prevalence and correlates of stress and burnout among U.S. healthcare workers during the COVID-19 pandemic: A national cross-sectional survey study*, 35 ECLINICALMEDICINE 1 (2021).

[102] Hoffman, *supra* note 97.

[103] *Id.*

[104] *Id.*

[105] *Id.* at 60.

[106] Prasad et al., *supra* note 101, at 4.

structural reform needed to sustain healthcare workers existing as valued human beings at the intersection of calling and crisis, physician burnout will persist as one of health care's greatest concerns.

In *Medical Economics*'s Physician Burnout and Wellness Survey of 2021, 94% of respondents admitted feeling burned out from practicing medicine at some point in their career, and 80% revealed feeling burned out at that moment.[107] Some questioned whether "all this stress is worth it," and others found themselves unsatisfied, unfulfilled, and resentful of their career choice.[108] Additionally, 78% of respondents answered "yes" when asked if their burnout has ever made them want to quit practicing medicine, and some recounted cutting their work hours in half in order to cope.[109] Such profound feelings of dissatisfaction in the workforce are unlikely to produce the highest quality of care, and, although some physicians assert that their "worst state" will not adversely affect patient care, the risk of providing poor care that endangers patient welfare is palpable.[110] Burnout, therefore, is a public health threat that policymakers cannot ignore.[111]

As rising rates of physician burnout continue to cause concern, so too does another reality: compassion fatigue. A relatively new term, "compassion fatigue" is defined as an "extreme state of tension and preoccupation with the suffering of those being helped to the degree that it can create a secondary traumatic stress for the helper."[112] While burnout tends to be characterized by physical exhaustion, compassion fatigue is more emotional and carries a heavy personal toll. According to Dr. Dike Drummond, a former family physician who now leads a physician coaching practice, compassion fatigue "shows up as cynicism and sarcasm about the

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[107] *The Costs of Burnout*, MED. ECON., Sept. 2021, at 21, https://cdn.sanity.io/files/0vv8moc6/medec/c81690b7bc037e2266a1b618957c765b03e6794f.pdf/me0921_ezine%20(1).pdf.
[108] *Id.*
[109] *Id.*
[110] *Id.*
[111] *Id.*
[112] Frank Celia, *Compassion Fatigue: A Different Kind of Burnout*, DUKE HEALTH (Oct. 22, 2019), https://physicians.dukehealth.org/articles/compassion-fatigue-different-kind-burnout.

very people you are supposed to serve."[113] Its symptoms include apathy toward work or patients, withdrawal from loved ones, negative changes in behavior, and even gastrointestinal problems or headaches.[114] Some argue it derives from the way medical professionals are trained to always put the patient's needs before their own, even if that means shortchanging their personal and emotional lives.[115] This mix of altruism and unmet needs results in various psychological problems, particularly in high-pressure and high-risk scenarios, and produces frustrated healthcare workers who "view COVID-19 patients differently than they did a year ago."[116]

Compassion fatigue is especially prevalent among critical care nurses in disaster contexts, such as a pandemic, because the expectation to confront and cope with the need for care can exceed the ability to provide it, thus leading to emotional distress in staff.[117] Since March 2020, health professionals were confronted daily with large numbers of people for whom the outcome was dire, such as those diagnosed with COVID-19 and requiring admission to brimming emergency or intensive care units.[118] Several factors, including the ease of transmission, limited medical equipment, and the general level of anxiety within the community contributed greatly to this unmanageable capacity; however, the chief problem is public divisiveness fueled by misinformation.[119] Dr. Nada Fadul, associate professor of infectious diseases at the University of Nebraska Medical Center, maintains that "[t]he damage has been done by media and anti-vaxxers" and "false advertising is leading to deaths every single day."[120]

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[113] *Id.*
[114] *Id.*
[115] *Id.*
[116] Melinda Young, *COVID-19, Dying Patients, and Compassion Fatigue: How Can Case Managers Cope?*, RELIAS MEDIA (Nov. 1, 2021), https://www.reliasmedia.com/articles/148581-covid-19-dying-patients-and-compassion-fatigue-how-can-case-managers-cope.
[117] Jalal Alharbi et al., *The potential for COVID-19 to contribute to compassion fatigue in critical care nurses*, 29 J. CLINICAL NURSING 1, 1-3 (2020).
[118] *Id.*
[119] Young, *supra* note 116.
[120] *Id.*

Misinformation surrounding quarantine, mask use, and vaccination contributed greatly to provider frustration and stress as healthcare professionals were left to remedy the dissonance of unvaccinated patients and constraints of the health system. Dr. Fadul further stated that "[m]ost healthcare providers are going through emotional trauma right now" as they are drained from the relentless grief and anguish.[121] Dr. Kernana Manion, executive director of the Center for Physician Rights, also noted that "[m]oral injury occurs when the nurse or doctor feels that, '[t]he patients I've dedicated my life to treating are now here because of their own negligence and now they're imposing upon me and my team to treat them, while also exposing us to continued danger from this virus.'"[122]

In short, hospital work is becoming more emotional; healthcare workers are seeing many patients die from a preventable disease daily; and patients and families are stressed and fearful.[123] There is political and societal tension between the public health message that everyone should vaccinate, wear masks, and do what they can to prevent the spread of the virus and the individualistic inclination of people to focus on their own health priorities and personal choices.[124] Thus, understandably, health and welfare systems are overwhelmed, and policymakers can no longer turn a blind eye. Although there is likely no sweeping remedy that will address these issues, a number of broad modifications can be made to incrementally yield improvement and support physician wellness.

B. Remedies to Promote Physician Wellness

Compassion and empathy are finite resources, and occasionally referring to frontline workers as "heroes" does little to address the struggles they truly face.[125] There are, in fact, some pragmatic improvements that can be made to prioritize physician

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[121] *Id.*

[122] Sadia Rafiquddin, *Doctors treating unvaccinated Covid patients are succumbing to compassion fatigue*, GUARDIAN (Sept. 18, 2021, 8:00 AM), https://www.theguardian.com/us-news/2021/sep/18/doctors-caring-unvaccinated-covid-patients.

[123] Alharbi et al., *supra* note 117.

[124] *Id.*

[125] *See COVID-19 frontline health care heroes*, AMA, https://www.ama-assn.org/amaone/covid-19-frontline-health-care-heroes (last visited Dec. 28, 2021).

well-being and counteract burnout and compassion fatigue. Some recommendations include relieving physicians' workloads by streamlining electronic health record-related regulations; measuring physician wellness in addition to other quality measures already reported to the Centers for Medicare and Medicaid Services (CMS); implementing proven burnout-easing measures like support programs and scribe employment; and actively countering health misinformation that fuels vaccine mistrust and hesitancy.[126]

Three major contributors to physician burnout reported in the aforementioned *Medical Economics*'s survey included too many work hours and a poor work-life balance; too much paperwork and regulations; and electronic health records (EHR). In general, physicians are finding that their careers are increasingly out of their own control, and external forces are interfering with the reasons they went into medicine in the first place: to treat patients and be a trusted partner in their health.[127] The practice of medicine and the patient relationship has shifted to corporate control, and contemporary physicians must navigate evolving regulatory requirements and dedicate a vast amount of time responding to their demands.[128] Under the CMS, legislation like the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) and initiatives like quality measures and Meaningful Use regulations work to assure quality health care for Medicare beneficiaries, which constitute approximately 64,000,000 Americans.[129] Comprehensively, these initiatives measure healthcare processes, outcomes, patient perceptions, and organizational structures to identify the highest priorities to improve patient care.[130] They also, however, impose greater workloads on physicians seeking to be paid by Medicare, requiring quality improvement, public reporting, and pay-for-reporting programs for specific healthcare providers.[131]

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[126] Hoffman, *supra* note 97, at 107-12.
[127] *The Costs of Burnout*, *supra* note 107.
[128] Hoffman, *supra* note 97, at 101.
[129] *What is Medicare?*, MEDICARERESOURCES.ORG, https://www.medicareresources.org/basic-medicare-information/what-is-medicare (last visited Dec. 28, 2021).
[130] *Quality Measures*, U.S. CTRS. FOR MEDICARE & MEDICAID SERVS., https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityMeasures (last visited Dec. 28, 2021).
[131] *Id*.

Health economist Gail Wilensky argues that healthcare quality measures must be dramatically revised and simplified.[132] Similarly, the American College of Physicians issued a position paper making several recommendations for reducing clinicians' administrative tasks and emphasizing the need for all stakeholders, including public and private payers, health care providers, patients, and EHR vendors, to collaborate and determine how best to streamline said tasks.[133] The CMS also proposed removing some quality measures, "a step that is welcomed by many health care providers," but no final decisions have been made yet as to how the government will simplify and trim its regulatory requirements.[134]

If consolidating requirements is unlikely, an alternative remedy may be appropriate: require the inclusion of physician wellness among the CMS quality measures.[135] As discussed, inherent in quality care is the need for healthy, fulfilled, and valued providers. Thus, MACRA and the Meaningful Use regulations should be revised to include a physician wellness measure, which can be quickly assessed annually and reported to relevant agencies.[136] A permissible level of burnout should be established, and CMS may then include organizations' physician burnout rates in its reimbursement calculus, creating a meaningful incentive to tend to clinician wellness.[137]

Further, promoting physician wellness is a professional ethical obligation pursuant to the AMA's Code of Medical Ethics that establishes "an obligation to ensure that colleagues are able to provide safe and effective care, which includes promoting health and wellness among physicians."[138] Reporting and tracking physician wellness would also encourage the implementation of a variety of interventions, including educational programs regarding mindfulness and stress management, support through teamwork, or the hiring of scribes.[139] Indeed, Dr. Tait Shanafelt, Stanford

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[132] Hoffman, *supra* note 97, at 102.
[133] *Id.*
[134] *Id.* at 103.
[135] *Id.* at 107.
[136] *Id.*
[137] *Id.*
[138] Hoffman, *supra* note 97, at 107.
[139] *Id.*

Medicine's first Chief Wellness Officer, credits such initiatives for the reduction of burnout rates between 2014 and 2017.[140] Without workforce wellness, it is impossible to achieve CMS's goal of effective, patient-centered, quality health care.

By fostering proven methods of alleviating physician burnout, medical professionals may feel much more inclined and empowered to promote their own wellness, thus remaining content and productive members of the healthcare industry. One self-help measure physicians often rely on to mitigate their administrative workload is employing scribes to handle EHR data entry while doctors interact with patients, which significantly reduces the time physicians spend on documentation.[141] In doing so, physicians are able to see more patients and avoid any potential EHR errors that may arise as a result of chaotic, time-strapped circumstances. Overall, many physicians find that scribes significantly improve their work quality and general job satisfaction.[142]

Still, to truly reduce the exorbitant workload healthcare workers have borne, initiatives aimed at addressing and correcting health misinformation are pivotal. As discussed, the largely unrestrained nature of social media contributes significantly to misinformation's ubiquity. Technology platforms are instrumental in combatting its effects and should be strong advocates of clear, concise, and accurate health information. Some approaches media outlets may take include strengthening the monitoring of misinformation; prioritizing early detection of misinformation "super-spreaders" and repeat offenders like the Disinformation Dozen; amplifying communications from trusted messengers and subject matter experts; and protecting health professionals, journals, and others from online harassment.[143] These recommendations are based on the U.S. Surgeon General's Advisory on Building a Healthy Information Environment and reflect the idea that "[l]imiting the

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[140] *Id.*
[141] *Id.* at 94.
[142] *Id.*
[143] Vivek H. Murthy, *Confronting Health Misinformation: The U.S. Surgeon General's Advisory on Building a Healthy Information Environment*, U.S. PUB. HEALTH SERV., https://www.hhs.gov/sites/default/files/surgeon-general-misinformation-advisory.pdf (last visited Dec. 28, 2021).

spread of health misinformation is a moral and civic imperative" that requires a "whole-of-society effort."[144]

In addition to technology platforms, research institutions, media and health organizations, educational institutions, and individual families and communities can make subtle changes in daily life that will greatly impact health care, thereby alleviating the substantial burden the pandemic has placed on frontline workers. Some changes include learning how to identify and avoid sharing health misinformation; educating students and the public on common tactics used by those who spread misinformation online; proactively engaging with patients and the public on misinformation; and considering headlines and images that inform rather than shock or provoke.[145] By equipping Americans with the tools needed to identify misinformation and confidently rely on trusted public health officials, individuals may be able to distinguish between evidence-based information and anecdotal opinions and create an opportunity for credible information and trusted voices to also retain a viral nature.[146] As a result, lingering distrust in health care may subside, creating space for proactive, accurate, and easy-to-understand health information to be shared across various mediums and diverse communities with the hope of reducing vaccine hesitancy and preventable hospitalizations or deaths.

V. CONSTITUTIONAL CONSIDERATIONS

Vaccination is undeniably one of the most effective public health tools at society's disposal. The scientific foundation for vaccination rests upon the concept of "herd immunity" for the protection of an entire population or community from contagion.[147] The efficacy of a vaccine is dependent on a "sufficiently large or significant percentage (approximately eighty to ninety-five percent)

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[144] *Id.* at 2.
[145] *Id.* at 9-10.
[146] *See* Krista Conger, *How misinformation, medical mistrust fuel vaccine* hesitancy, STANFORD MED. (Sept. 2, 2021), https://med.stanford.edu/news/all-news/2021/09/infodemic-covid-19.html.
[147] Phoebe E. Arde-Acquah, *Salus Populi Suprema Lex Esto: Balancing Civil Liberties and Public Health Interventions in Modern Vaccination Policy*, 7 WASH. UNIV. JURIS. REV. 337, 343 (2015).

of a given group being immunized," thus making the community strong enough to ward off infection from unvaccinated persons or those for whom the vaccine is ineffective.[148] In the early twentieth century, a time when relied-upon methods of inoculation "had low levels of preventive success and occasionally produced full-blown cases of the disease," infectious disease epidemics like smallpox, influenza, poliomyelitis, diphtheria, and tuberculosis killed millions.[149] It was not until the advent of vaccination that medical and scientific discourse discovered the prolonging effects on life and its ability to control infectious disease epidemics, prompting the replacement of inoculation.[150]

One persistent concern, however, was the "phenomenon of 'free riding,'" where some individuals refused vaccination yet sought still to benefit from the broader herd immunity.[151] In response, several states enacted mandatory vaccination statutes and regulations. In fact, in 1827, Massachusetts spearheaded mandatory vaccination by becoming the first state to require "childhood vaccination laws" as a condition to school attendance and enrollment.[152] Many states followed soon after, mandating vaccination and contributing to a new era where "vaccines . . . protected communities from diseases that in previous eras were responsible for the majority of the world's illness and death."[153] Eventually, once smallpox had been eradicated and polio was nearing its elimination, vaccination paved its path to becoming an integral component of public health efforts and policy.[154] As a result, the scope of existing legal constraints was expanded to ensure that federal and state efforts to achieve high immunization levels carefully coexisted with constitutionally protected individual liberties.[155] Protecting public health "has always required law, particularly the use of law to empower and limit governmental actors responsible for

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[148] *Id.* at 343.
[149] *Id.*
[150] *Id.* at 344.
[151] *Id.*
[152] *Id.* at 344-45.
[153] Arde-Acquah, *supra* note 147, at 344-45.
[154] *Id.*
[155] *Id.* at 343-44.

responding to disease threats."[156] In a country that espouses individualism over collectivism, however, this principle has unsurprisingly been met by much resistance despite scientific evidence in its favor.

A. Balancing Individual Choice and Public Health

Salus populi suprema lex esto, argued Cicero: "the health of the people is the supreme law."[157] This popular maxim is still regarded today as "a fundamental principle of the social compact that the whole people covenants with each citizen and each citizen with the whole people."[158] In essence, it maintains that certain laws, particularly those concerning public health, be governed for the common good and not for the "private interests of any one man, family, or class of men" as there may be instances, such as in times of crisis, when individual interests must give way to the needs of society.[159]

The WHO defines public health as "all organized measures (whether public or private) to prevent disease, promote health, and prolong life among the population as a whole."[160] Similarly, the American Public Health Association (APHA), characterizes public health as "the practice of preventing disease and promoting good health within groups of people, from small communities to entire countries."[161] The Institute of Medicine (IOM) added to this designation, noting in a landmark report that public health is "what we, as a society, do *collectively* to assure the conditions in which people can be healthy."[162] Inherent in each definition is a duty to preserve public health both on public and private levels. In the United States, the duty to protect and promote the general health and welfare of the people has historically been delegated to states as

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[156] *Id.*
[157] *Id.* at 347.
[158] Scott Burris, *Individual Liberty, Public Health, and the Battle for the Nation's* Soul, REGUL. REV. (June 7, 2021), https://www.theregreview.org/2021/06/07/burris-individual-liberty-public-health-battle-for-nations-soul.
[159] *Id.*
[160] *Id.*
[161] *Id.*
[162] *Id.* (emphasis added).

sovereign governments, a product of the Tenth Amendment's state police powers.[163] Specifically, the police power allocates to a state "the authority . . . to enact . . . 'health laws of every description'" and broadly regulate in the public's interest.[164] State and local health commissions now exercise broad powers to, among other things, quarantine the sick; condemn unsanitary properties; exclude infectious and potentially infectious immigrants; and compel vaccination for diseases like smallpox—each of which embodies the principle of "overruling necessity."[165]

For millennia, health experts have relied on the power of "overruling necessity," the authority to do whatever was required to preserve human welfare, to advance public health imperatives and translate them into institutions of American law.[166] "Throughout the nineteenth century, Americans went to court to challenge the authority of new public health authorities to condemn property, impose quarantines, compel vaccination, and more."[167] Generally, courts upheld the actions of health authorities but "insisted that regulation bear a rational relationship to an actual health imperative, and judges made clear that they had the final authority" on the issue.[168] In 1905, the Supreme Court decided the "most important public health crisis case in American history," *Jacobson v. Massachusetts*, which upheld mandatory vaccination regulations intended to slow the spread of smallpox in Cambridge, Massachusetts.[169] The constitutional question at issue, which still troubles many today, was whether a state has the authority to enact laws that protect the public health and safety of its citizens by compelling them to do things they may not otherwise have done.[170]

Simply put, the Court found that the state could not compel vaccination in an "arbitrary, unreasonable manner," but it may if, in

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[163] *Id.*
[164] Burris, *supra* note 158.
[165] John F. Witt, *Pandemic Files: The Law of Salus Populi*, YALE REV., https://yalereview.org/article/law-salus-populi (last visited Feb. 2, 2022).
[166] *Id.*
[167] *Id.*
[168] *Id.*
[169] *Id.*
[170] *Id.*

their opinion, it was necessary for public health or safety.[171] In that case, the Plaintiff, Jacobson, argued that the state restricted his freedom by subjecting him to a fine or imprisonment for refusing to submit to vaccination.[172] The Court famously responded to his argument as follows:

> The liberty secured by the Constitution of the United States to every person within its jurisdiction does not import an absolute right in each person to be, at all times and in all circumstances, wholly freed from restraint. There are manifold restraints to which every person is necessarily subject for the common good.[173]

The Court further noted that a state has a duty to "protect the welfare of the many and to refrain from subordinating their interests to those of the few."[174] Ultimately, the Court held the Massachusetts law constitutional, finding that it was substantially related to the government's important interest in stopping the spread of smallpox.[175] It did, however, add that a state's exercise of police power did not necessarily permit it to "jeopardize the health or life of an individual," thus giving way to the development of religious or medically necessary exemptions from immunization.[176]

A century later, the challenges posed by the COVID-19 pandemic are reminiscent of those that beset our ancestors. Now, however, citizens have become accustomed to a century and more of freedom from the "overruling necessity" of public health restrictions, and the federal government remains largely unprepared to address crises of this nature. Further complications are created by the U.S.'s market-based health care system with a "just-in-time model of patient care" that left the country without critical reserves.[177] It was

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[171] Witt, *supra* note 165; *see* Arde-Acquah, *supra* note 147.
[172] Sara Mahmoud-Davis, *Balancing Public Health And Individual Choice: A Proposal For A Federal Emergency Vaccination Law*, 20 HEALTH MATRIX: J.L.-MED. 219 (2010).
[173] *Id.*
[174] *Id.*
[175] *Id.*
[176] *Id.*
[177] Witt, *supra* note 165.

not long until a hodge-podge of state and local institutions, decentralized hospitals, and private industries scrambled to patch together a response described as "alternately inspiring and inadequate."[178] Additionally, political and social debates breaking out among people living in isolation or in quarantine proceeded "according to script, replicating the bitter polarization of a year ago, or two years ago, or three."[179] Healthcare workers, serving more today as an extreme version of damage control, are now left to reconcile the dissonance. As the *Jacobson* Court reasoned, the government is "ordained for the good of us all," and individual rights, although sacred, should be set aside whenever necessary for the common good.[180] Therefore, the legal test is couched in terms of "reasonable necessity" rather than a balance between individual rights and the public good.[181]

Jacobson's importance in modern law arises from "its vision of coexistence and cooperation in a democratic commonwealth."[182] Today, however, this vision is in jeopardy as "courts have unveiled a new view based less on the social contract than on a strong form of libertarianism."[183] In *Wisconsin Legislature v. Palm*, for example, Wisconsin's Supreme Court overturned the state's COVID-19 emergency measures, arguing that the problem was not so much a pandemic as it was "tyranny."[184] Although "[s]aving lives is a worthwhile goal" to many, one justice contended that "[t]he people of Wisconsin pronounced liberty to be of primary importance, establishing government principally to protect their freedom."[185] As such, the logic embraced by the *Jacobson* Court, which guided the U.S. through several prior pandemics and epidemics, has now flipped: "[g]overnment is established primarily to protect the liberty of individuals . . . even if it puts all the rest of society at risk."[186]

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[178] *Id.*
[179] *Id.*
[180] Burris, *supra* note 158.
[181] *Id.*
[182] *Id.*
[183] *Id.*
[184] *Id.*
[185] *Id.*
[186] Burris, *supra* note 158.

James Colgrove, "an outspoken critic of the tenuous balance between public health interventions and individual liberties," stated, "[o]ne of the most fundamental and enduring tensions in . . . public health is the balance between the rights of the individual and the claims of the collective, and nowhere is this dynamic more salient than in policies and practices surrounding immunization."[187] With the federal appellate bench and Supreme Court as of 2021 now more populated with judges sympathetic to the charge of hyper-libertarianism in many ways, the idea supporting the social contract has morphed into an individualistic arrangement: win or lose, beat COVID-19 or succumb, and the collective has nothing to do with it.[188] This version of America resembles a "Hobbesian war of all against all," which leads to "a few big winners in gated enclaves and a majority that is sick, tired, stressed, and increasingly humiliated."[189] In order to comprehensively address the problems America faces, from extreme social inequality to fateful climate change, cooperation and shared sacrifice are indispensable. In keeping with the *Jacobson* Court's rationale, a "society based on the rule that each one is a law unto himself would soon be confronted with disorder and anarchy."[190] Contrary to popular belief, prioritizing individual liberty over the collective good will not get the COVID-19 pandemic under control.[191] Indeed, society must "heed the more traditional wisdom of American law"[192] to truly overcome the pandemic and alleviate the immense pressure placed on the healthcare industry. "Real liberty for all could not exist under the operation of a principle which recognizes the right of each individual person to use his own, whether in respect of his person or his property, regardless of the injury that may be done to others."[193]

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[187] Arde-Acquah, *supra* note 147, at 339.
[188] Burris, *supra* note 158.
[189] *Id.*
[190] *Id.*
[191] *Id.*
[192] *Id.*
[193] *Id.*

B. The Right to Refuse

In the interest of the greater good, "justice dictates that physicians provide care to all who need it," and they may not refuse services based on discriminatory factors, such as protected classes of race, ethnicity, gender, religion, or sexual orientation.[194] Notably, vaccination status is not considered a protected class.[195] Thus, physicians may *technically* refuse services based on an individual's decision to opt out of life-saving immunization. However, many institutions have created their own safeguards against this pseudo form of discrimination, and physicians across the board largely regard this stalemate as part of the job. For example, some patients may request services that are antithetical to the physician's personal beliefs; abortion being the most common example.[196] The complexities of balancing the physician's personal beliefs and internal values make it almost impossible to accept every patient, but the larger issue is simply how far the physician's ethical and social responsibility should extend.

In 1986, Congress enacted the Emergency Medical Treatment and Active Labor Act (EMTALA) in response to "patient dumping" by hospitals refusing to treat indigent patients.[197] Under EMTALA, all hospitals and physicians participating in and benefitting from Medicare are bound by a duty to stabilize a patient in an unmistakable emergency and provide medical screening examinations for each patient who seeks emergency care, regardless of their ability to pay.[198] While physicians are not held directly liable for failing to comply with EMTALA, repeated violations could lead

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[194] June M. McKoy, *Obligation To Provide Services: A Physician-Public Defender Comparison*, AMA J. OF ETHICS (May 2006), https://journalofethics.ama-assn.org/article/obligation-provide-services-physician-public-defender-comparison/2006-05.

[195] *But see* Jana Bjorklund, *Vaccination Status a Protected Category? In Montana, Yes. Will Other States Follow?*, GOVDOCS (May 27, 2021), https://www.govdocs.com/vaccination-status-a-protected-category (explaining that the state of Montana is the first and only jurisdiction thus far to recognize an individual's vaccination status as a protected category).

[196] McKoy, *supra* note 194.

[197] *Id.*

[198] *Id.*

to monetary damages and exclusion from participation in Medicare and Medicaid.[199] The obligation to treat patients in nonemergent situations, on the other hand, is less clear. Principle VI of the AMA's Principles of Medical Ethics dictates that a "physician shall, in the provision of appropriate patient care, except in emergencies, be free to choose whom to serve, with whom to associate, and the environment in which the provide medical care."[200] Therefore, with the exception of EMTALA and already-established patient-physician relationships, there is no common law duty or ethical obligation that requires providers to treat every patient.[201] Although the AMA Council on Ethical and Judicial Affairs considers it "unethical to refuse to treat patients based on certain disease states such as HIV," that ruling adds little to the question of "whether physicians are wrong in refusing patients without specified conditions or disabilities."[202]

Thus, the moral dilemma within a physician's conscience ensues. Morality urges that he or she treat all patients, no matter what, but a multitude of health system factors, including rising medical liability premiums; stagnant reimbursement from commercial insurers; escalating overhead; and personal moral beliefs "can make following one's conscience costly."[203] Moreover, confidence and trust lay at the core of patient-physician relationships and are critical in diagnosis and treatment; therefore, factors that threaten this foundation further complicate the physician's decision. If the physician "harbors resentment against the patient because of lifestyle or failure to comply with treatment," the patient-physician alliance is compromised, and so too is the care.[204]

An adamant belief in inaccurate health information is an age-old phenomenon, but it has found a new, "profoundly frustrating" expression during the COVID-19 pandemic.[205] Health authorities

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[199] *Id.*
[200] *Id.*
[201] *Id.*
[202] McKoy, *supra* note 194.
[203] *Id.*
[204] *Id.*
[205] Timothy M. Smith, *No COVID-19 vaccination, no care? Why that's the wrong path*, AMA (Sept. 21, 2021), https://www.ama-assn.org/delivering-care/ethics/no-covid-19-vaccination-no-care-why-s-wrong-path.

have had to contend with "sub-optimal levels of public trust in newly developed vaccines," illustrating a stark contrast from the vaccine trust environment that characterized earlier vaccine races.[206] Despite being presented with the best available scientific evidence supporting vaccination, many patients still refuse, leading, unfortunately, to countless, preventable hospitalizations and deaths.[207] This cognitive dissonance has led some physicians to refuse care to patients who have unjustifiably forgone COVID-19 vaccination.[208]

As infuriating as it may be to treat patients who refuse the safe and highly effective COVID-19 vaccines, physicians have a duty to mind their professional ethical obligations. As AMA President Dr. Gerald E. Harmon stated, "[e]thics in our profession is about making hard choices in the face of conflicting values . . . ."[209] Further, inherent in a physician's commitment to care for those who are sick or injured is a duty to treat in other circumstances, including public health crises, when doctors may face "greater than usual risks to their own safety, health or life."[210] Therefore, generally, physicians should not refuse a patient based solely on their vaccination status—although they likely have a right to—unless doing so would "'seriously compromise' the physician's ability to provide care needed by other patients."[211] This guidance is in accordance with the AMA's prioritization of "scientific integrity, transparency, and public trust in the fight to contain the global spread of COVID-19."[212]

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[206] Rutschman, *supra* note 81, at 32-33.
[207] *See* Stephanie Soucheray, *Nearly all US COVID-19 deaths now preventable*, CTR. FOR INFECTIOUS DISEASE RSCH. & POL'Y (June 25, 2021), https://www.cidrap.umn.edu/news-perspective/2021/06/nearly-all-us-covid-19-deaths-now-preventable.
[208] *See, e.g.*, Deb Gordon, *No Jab? No Service. Doctors Flip The Script On Covid-19 Vaccine Mandates*, FORBES (Oct. 1, 2021, 1:00 PM), https://www.forbes.com/sites/debgordon/2021/10/01/no-jab-no-service-doctors-flip-the-script-on-covid-19-vaccine-mandates; Emily Adams, *Florida doctor to refuse in-person treatment for unvaccinated patients*, USA TODAY (Sept. 5, 2021, 7:27 PM), https://www.usatoday.com/story/news/health/2021/09/05/florida-doctor-refusing-treat-unvaccinated-patients-person/5742401001.
[209] Smith, *supra* note 205.
[210] *Id.*
[211] *Id.*
[212] *Id.*

One final factor to consider amongst the highly frustrating and convoluted logic of the misinformed is the pervasive nature of misinformation in our digital age. Although this may be particularly challenging for healthcare workers who have dedicated their lives and careers to the standards of evidence-based medicine, it is important to engage empathetically in the discussion of COVID-19 misinformation. When seeing misinformation or disinformation spread online or in person, it is tempting to respond with anger or ridicule; however, an important consideration is the reality that the vast majority of individuals have not undergone training in reviewing medical research and are generally trying to make the best decision for themselves or their families. Concepts that are instantly apparent to medically trained professionals are completely foreign to others, yet society is expected to know what to do and who to listen to, despite contradicting guidance from city, county, state, and federal levels of government.[213] To be sure, individuals who lack the relevant expertise should undoubtedly err on the side of evidence-based medicine, but those that do not do not deserve contempt for being presented with deceptive data and conflicting messages.

Emotionally charged issues like public health crises notoriously amplify confirmation bias and attitude polarization.[214] Social media has "heightened our respective filter bubbles to an extent that society has never seen before,"[215] and personal data is being covertly harvested to tailor individual experiences and boost user engagement regardless of the content being amplified. As such, condescension and divisive rebuttals "only act to increase the emotional weight of the issues at hand" and derail conversations about accurate and transformative health information.[216] The pandemic greatly shifted the world society had come to know, and,

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[213] *See, e.g.*, Joseph Ax & Tim Reid, *As Americans navigate conflicting COVID-19 mask advice, 'everyone is confused'*, Reuters (July 23, 2021, 2:42 PM), https://www.reuters.com/world/us/americans-navigate-conflicting-covid-19-mask-advice-everyone-is-confused-2021-07-23.

[214] Yenting Chen, *Empathy in the age of misinformation: An open letter to healthcare and science professionals*, MED. NEWS TODAY (May 18, 2020), https://www.medicalnewstoday.com/articles/empathy-in-the-age-of-misinformation-an-open-letter-to-healthcare-and-science-professionals#2.

[215] *Id.*

[216] *Id.*

for people trying to identify the cause of such a radical change in perceived reality, it is tempting to "look for explanations that minimize the role of the natural world, to seek reassurances that the problem is overblown, or to find evidence of human-made hoaxes and conspiracies."[217] This temptation is not a reflection of a person's intelligence or morality, but rather of an inherent and universal psychological defense mechanism not easily overcome.[218] Thus, for collective voices to remain effective, an empathic approach and an awareness of the consequences of interactions are imperative. "Only from an empathetic footing can we hope to defuse some of the substantial emotional reflexes innate to our current crisis. This level of empathy is well within our capabilities."[219]

VI. POTENTIAL CURES OF THE INFODEMIC

The scope and intensity of the infodemic has been largely driven by social media and its ubiquity. Vulnerable users are fed incendiary content; known sources of deliberately untrue information are left unchecked; and key government actors use these vices for nothing more than political gain. In a society that espouses personal autonomy and self-determination, these practices are often seen as a necessary evil of the greater good: freedom of speech.

A. The Need for Content Moderation

The Pew Research Center estimates that in 2019, 72% of U.S. adults used at least one social media platform, and the majority of users visited the site at least once a week.[220] For years, Congress has raised concerns over the use of the Internet to host, distribute, and exchange potentially illegal, harmful, and objectionable content, including extremist content, content that may incite violence, and foreign propaganda.[221] It is clear that digital platforms can be highly

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[217] *Id.*
[218] *Id.*
[219] *Id.*
[220] JASON A. GALLO & CLARE Y. CHO, CONG. RSCH. SERV., R46662, SOCIAL MEDIA: MISINFORMATION AND CONTENT MODERATION ISSUES FOR CONGRESS 4 (2021).
[221] *Id.*

profitable businesses that connect users and other market agents in ways not possible before the Internet. When successful, they create "powerful feedback loops called network effects and then monetize them by selling advertisements," generating trillions of dollars in wealth.[222] However, they have also enabled the distribution of fake news and products, manipulation of digital content for political purposes, and promotion of dangerous misinformation regarding elections, vaccines, and other public health matters, revealing how digital platforms can serve as double-edged swords.[223] Clearly, digital platforms can be used for both good and evil, but what is the solution? Inevitably, governments may become more engaged in oversight; however, the key is self-regulation,[224] and it is imperative that platforms act aggressively on it soon.

Historically, companies have risked creating a "tragedy of the commons" by prioritizing their self-interests over the "good of the consuming public or the industry overall," resulting in the long term destruction of the "environment that made them successful in the first place."[225] Although allowing companies to monitor and restrain themselves runs the risk of creating a "self-regulatory or regulatory 'charade,'" many argue that this "doesn't need to be the case."[226] For decades, "companies in the business of producing movies, video games, and television shows and commercials" have encountered issues as to the "appropriateness of 'content' in a way that resembles today's social media platforms."[227] In an effort to keep regulators at bay, entertainment industries created a self-imposed and self-monitored rating system that is used still today, which expanded into

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[222] Michael A. Cusumano et al., *Social Media Companies Should Self-Regulate. Now.*, HARVARD BUS. REV. (Jan. 15, 2021), https://hbr.org/2021/01/social-media-companies-should-self-regulate-now.

[223] *Id.*

[224] Self-regulation "refers to the steps companies or industry associations take to preempt or supplement governmental rules and guidelines. For an individual company, self-regulation ranges from self-monitoring for regulatory violations to proactive 'corporate social responsibility' (CSR) initiatives." *Id.*

[225] *Id.*

[226] *Id.*

[227] *Id.*

broadcasting, advertisement, and airline sectors, among others, and deterred intrusive government intervention.[228]

These historical initiatives provide several lessons for today's digital platforms, and the following recommendations may prove useful in combatting our modern infodemic. First, history has shown that industries tend to get serious about self-regulation whenever a "credible threat of government regulation" is looming, regardless of the negative effects it may have on short-term sales and profits.[229] Thus, platforms must remain proactive in anticipating when government regulation may play a role in their businesses.[230] In various "new" industries, there is often a "vacuum in regulation in the early years" followed by government intervention to regulate or pressure firms to curb abuses in response to the "wild west" environment created.[231] By bypassing such interference, platforms may avoid a tragedy of the commons and protect the environment that originally allowed the digital space to thrive. Second, cooperation or "coopetition," where platforms compete as well as cooperate with rivals, is pivotal.[232] Proactive self-regulation is "often more successful when coalitions of firms in the same sector work together."[233] This coalition-backed activity has repeatedly been seen in movie and video-game rating systems limiting inappropriate content; television advertisement standards pertaining to unhealthy products like alcohol and tobacco; and social media companies implementing codes of conduct on terrorist activity.[234] Since individual platforms may hesitate to self-regulate due to the fear of incurring additional costs that their competitors do not, industry coalitions have the added benefit of reducing free-riding.[235]

Lastly, the algorithms or other computational processes that platforms use to rank or alter the delivery or display of information,

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[228] Cusumano et al., *supra* note 222.

[229] Common examples where this pattern occurred include "tobacco and cigarette ads, airline reservations, social media ads for terrorist group recruitment, and pornographic material." *Id.*

[230] *Id.*

[231] *Id.*

[232] *Id.*

[233] *Id.*

[234] Cusumano et al., *supra* note 222.

[235] *Id.*

except for those sorted chronologically, alphabetically, by user rating, or randomly, should be discarded or heavily revised.[236] These algorithms, which sort and prioritize content posted on social media sites, are generally built to boost user engagement and advertising revenue.[237] According to a *Wall Street Journal* article, slides presented by an internal Facebook team to company executives in 2018 stated, "[o]ur algorithms exploit the human brain's attraction to divisiveness," and warned that the algorithms would promote "more and more divisive content in an effort to gain user attention and increase time on the platform."[238] By shifting the focus from a purely financial incentive to a more holistic goal, social media platforms will be able to minimize the psychological and emotional damage inflammatory content inflicts on users and society as a whole. The ability to prioritize content and choose what one sees on their feed should be placed in the hands of users, allowing them to adjust their preferences and curate their accounts based on any searches or lists they've personally created.

In conclusion, as history suggests, digital platforms should avoid waiting for governments to impose controls.[239] Instead, they should act proactively and pragmatically, in a way that caters to the needs of the industry while protecting users and society from unsafe discourse. Content moderation, aggressive self-regulation, and consistent enforcement are essential in an effort to dwindle the harmful effects of the infodemic.

B. Free Speech Concerns and Section 230 Protections

Attention has often shifted to social media platforms given their ability to disseminate information quickly and widely and their use of algorithms to amplify content most likely to generate engagement.[240] Some members of Congress are concerned about social media's role in the proliferation of misinformation and have explored how social media operators may stop or slow that

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[236] GALLO & CHO, *supra* note 220, at 28.
[237] *Id.* at 2.
[238] *Id.* at 10.
[239] Cusumano et al., *supra* note 222.
[240] GALLO & CHO, *supra* note 220, at 10.

dissemination through content moderation.[241] "Other [m]embers' interest in content moderation relates to concerns that platform operators are moderating content that should not be restricted."[242] Both perspectives, however, focus on Section 230 of the Communications Act of 1934, which "broadly protects interactive computer service providers, including social media operators, and their users from liability for publishing, and in some instances removing or restricting access to, another user's content."[243]

The world witnessed what was arguably the worst example of digital platforms' impact on society with the January 6, 2021, insurrection attempt at the U.S. Capitol.[244] In response to Donald Trump's "call to action" fomented on social media, supporters sought to disrupt the certification of the Electoral College votes and prevent the president-elect from assuming office by essentially attempting a coup.[245] At the time, Twitter and Facebook were notoriously disinclined to censoring posts regarding conspiracy theories and fake news, finding solace in Section 230 and benefiting from its immunity.[246] However, false accusations of rigged elections and other incendiary, untrue news led these social media giants to begin flagging posts as "unreliable or untrue," if not removing them altogether.[247] In fact, in response to the attempted insurrection, Twitter and Facebook banned Trump from their platforms, citing his promotion of violence and criminal activity as a violation of their terms of service.[248]

"Technology that exploits big data, artificial intelligence, and machine learning, with some human editing, will increasingly give digital platforms the ability to curate what happens on their platforms," but the issue will always be to what extent tech giants will be willing to self-regulate.[249] As private companies, social media operators can determine what content is allowed, and content

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[241] *Id.*
[242] *Id.*
[243] *Id.*
[244] Cusumano et al., *supra* note 222.
[245] *Id.*
[246] *Id.*
[247] *Id.*
[248] *Id.*
[249] *Id.*

moderation decisions could be protected under the First Amendment.[250] Although some commentators maintain that content moderation infringes on users' First Amendment rights by censoring speech, the First Amendment applies to government action regulating speech and not to content moderation by private entities such as social media operators.[251] Ironically, government regulation of social media could itself be a First Amendment violation, furthering the need for self-regulatory measures over bright line federal guidelines.[252]

Section 230 states that "no provider or user of an interactive computer service shall be treated as the publisher or speaker of any information provided by another information content provider," granting online intermediaries a safe haven from liability for user-generated content.[253] Additionally, Section 230 includes a "[G]ood Samaritan" exception, which allows platforms to moderate (or remove altogether) content deemed obscene or offensive, "as long as it [is] done in good faith."[254] Although such content may contribute to some informative debates and conversations, it is clear that misinformation and disinformation, especially in public health crises, creates confusion and risk-taking behaviors that harm health, and platforms may moderate these effects without credible fear of infringements on free speech. Digital platforms applying stricter regulations to deceptive content would be doing a public service by enforcing moderation or changing algorithms so susceptible users are not constantly fed untrue information, which, in turn, places a heavy burden on the healthcare industry that a misinformed user will eventually rely on.

By acting decisively and proactively, social media platforms may decrease the number of encounters users have with untrue or unproven information, allowing them to make more informed decisions that benefit the common good. To avoid problematic and

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[250] Cusumano et al., *supra* note 222.
[251] Jennifer Huddleston, *Content Moderation, Section 230, and The First Amendment*, AM. ACTION F. (May 28, 2020), https://www.americanactionforum.org/insight/content-moderation-section-230-and-the-first-amendment.
[252] *Id.*
[253] Cusumano et al., *supra* note 222.
[254] *Id.*

convoluted government regulation, platforms must act "to introduce their own controls on behavior and usage" in a way that fosters open communication and free speech while prioritizing accurate, dependable, life-saving information.[255]

VII. CONCLUSION

"In crisis, the fault lines of ordinary politics reappear, only deeper."[256] The infodemic, accelerated by factors such as political ideology and reasoning styles,[257] sowed confusion, reduced trust in public health entities, and severely hindered efforts to vaccinate Americans and stop the spread of COVID-19 and its variants. The often-overlooked implication of this trajectory is the effect it has both mentally and physically on healthcare workers left to redress the mayhem fueled by spreaders of misinformation.

Healthcare workers' duty to treat rests on a relationship with patients, and trust is a fundamental aspect of that partnership. When trust dwindles, the potential for dangerous outcomes is heightened, creating detrimental repercussions for the physician, patient, or both. An infinite workload coupled with trauma and a severe emotional toll is already plaguing healthcare workers, and the addition of misinformed and emboldened patients simply adds insult to injury. However, misinformation is ubiquitous, and it preys largely on those most vulnerable to it. Therefore, misinformed patients should be met with empathy, and the inaccurate information they hold true should be corrected in personalized, less technical language that is accessible to all patients. Still, this instruction does not fall solely within the purview of a healthcare worker's job description; the onus is largely on digital platforms, media organizations, and the government to combat the infodemic, leaving the health care to medical professionals.

The confusion and subsequent mistrust created by, among other things, social media's amplification of provocative health misinformation; the Trump Administration's frequent dissemination

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[255] *Id.*
[256] Witt, *supra* note 165.
[257] Abrams, *supra* note 1.

of misleading COVID-19 information; and health agencies' inconsistent messaging has understandably led to hesitance with respect to public health initiatives. Some potential remedies exist to counteract these effects; however, America's main prerogative should be acknowledging that every sector of society, public and private, has a responsibility to act in the interest of the greater good. Individuals and institutions can and must do their part to confront misinformation and work toward a healthier information environment: one which champions decades of proven scientific evidence and places the collective good above self-interest.