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■ RESEARCH ARTICLE

How Socioeconomic Status Dictates the Health Care Patients with Type 1 Diabetes Receive in America

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ABSTRACT: An alarming number of Americans are denied access to sufficient and affordable health care. In fact, 137 million Americans fell into medical debt in 2019 alone, and every day, millions of patients across the nation go without necessary medical care, often resulting in deteriorated health, and even death. For example, twenty-six percent of Americans with type 1 diabetes must ration their insulin due to its cost, and thirteen young Americans died due to insulin rationing in the past few years. However, compared to the other wealthy countries of the world, these tragedies are unique to America: the only developed country without universal health care. This appalling circumstance is due to the fact that, in America, socioeconomic status dictates the health care patients receive. Monstrously prioritized corporate profits, obscenely expensive treatment prices, and inequitable access to professional medical care contribute to a healthcare system that fails to put patient well-being first, causing those of lower socioeconomic status to perish. Access to affordable, adequate health care should be a human birthright, but this is not America's reality.

KEYWORDS: Translational Medical Services; Other; Health Care; Equity; Type 1 Diabetes.

■ Introduction

In America, socioeconomic status dictates the health care patients receive. Obscenely expensive treatment prices and inequitable access to professional medical care all contribute to a healthcare system that fails to put patient well-being first. Those of lower socioeconomic status perish due to inadequate health care. Therefore, America must discard its capitalistic healthcare system for a universal one to prevent further suffering. Access to affordable and adequate health care should be a human birthright, but this is not America's reality.

For instance, Alec Smith was an American who died at twenty-six years old because he could not afford his insulin. Alec was single and made $40,000, so he did not qualify for any subsidies under the Affordable Care Act. Private insurance would have cost 80% of his income, and his month's supply of insulin cost $1,300. The exorbitant price of insulin in America barred Alec from receiving his necessary treatment, so he had to insulin ration. As a result, he died four days later due to diabetic ketoacidosis.[1] Tragically, Alec is not an isolated case: 13 young Americans died due to diabetic ketoacidosis caused by insulin rationing from 2017 to 2019.1 Alec's mother, Nicole Smith-Holt, stated, "My son and Jesy [a 21-year-old American veteran that also died due to insulin rationing], they were murdered. They were killed by big Pharma. The cause of death should actually be on their death certificates, corporate greed."[2] Undeniably, America must hold big Pharma accountable for the devastation that has transpired; America must redesign its healthcare system into universal care before more innocent patients suffer.

Even so, the majority of American society dismisses universal care in America as "socialist," ignoring a feasible solution to the dire problem. Furthermore, minimal research covers how patients with type 1 diabetes receive varying levels of health care depending on their socioeconomic status in America when managing their illness from the onset of the disease to the twenty-four-seven insulin treatments and glucose monitoring. Additionally, earlier research has wrongly generalized type 1 diabetes and type 2 diabetes as "diabetes." To reiterate, the focus of this paper is on type 1 diabetes to highlight how vital universal health care is for everyone to stop the socioeconomic disparities that persist in the American healthcare system. Type 1 diabetes is just an example of innumerable diseases, including cardiovascular disease, Crohn's disease, COPD, and cystic fibrosis, that people suffer from unnecessarily due to America's healthcare system.[3]

This paper focuses on type 1 diabetes, which affects 1.6 million Americans and is one of the plethora of diseases that patients unnecessarily suffer from in America.[4] Further, America's frequency of diabetic ketoacidosis varies significantly on socioeconomic status.[5] With a close look at type 1 diabetes, this paper exposes how the American healthcare system denies adequate care to those of lower socioeconomic status and debunks the common American myths plaguing universal health care.

Evolution of the American Healthcare Industry:

The American healthcare system has evolved to monopolize care with minimal government regulation —giving the healthcare industry the power to raise prices without question or justification.[6] The American healthcare system is inequitable and discriminates against patients of lower incomes, especially the working middle class, minority races, and those living in more impoverished geographical locations.[6]

In 1929, the Blue Cross and Shield Association, a non-profit organization, was the first company to insure hospital and

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doctor visits. The Blues were seen as a "force for good across America" because everyone paid the same steady rates, despite age or pre-existing health conditions. The Blues were so trusted in America that well-respected community leaders would encourage their neighbors to receive coverage.[6] Unfortunately, over time, the emerging field of healthcare attracted capitalistic businesspeople. For example, in 1951, Aetna and Cigna, two for-profit insurers, aggressively marketed their insurance. Due to this growing competition, health inequities in America became so stark that the government had to act. In an effort to protect Americans from corporate greed, President Lyndon B. Johnson and his administration passed the Social Security Act, establishing Medicare, a health insurance program for the elderly, and Medicaid, a health insurance program for the impoverished, on July 30th, 1965.[7] However, this act was insufficient as it only protected the elderly and starkly impoverished, and states could decide whether or not to provide Medicaid, leaving millions of Americans in the coverage gap without protection.[8] In fact, the state discretion gap alone leaves over two million Americans uninsured today.[9] This act allowed for-profit insurers to continue to make extensive profits, which eventually destroyed the remaining non-profit insurers. Soon after, non-profit private healthcare in America died as it could no longer keep up with for-profit companies; the last non-profit private healthcare system died in 1994 when the Blues switched over to a for-profit plan.[6] With these for-profit insurance companies, shareholders, investors, and executives began to get paid based on how well they financially performed, leading to corrupt and greedy price gouges to cover increased salaries, administration spending, lobbying, and marketing. These new measures only increased profit for the healthcare industry, not patients' well-being.[6] Health insurance companies raised deductibles, forcing patients to pay thousands of dollars before their insurance plan even kicked in.[6]

Consequently, as health insurance expanded, hospitals expanded into conglomerates, causing doctors to alter their medical practice, which then altered the production and kinds of drugs and devices prescribed. Conglomerate hospitals pressure doctors and nurse practitioners to see as many patients as possible in one day—instead of what they can realistically and adequately treat. Additionally, conglomerate hospitals pitted doctors against each other and their patients by hosting monthly competitions, rewarding whoever made the most money for the hospital.[6] As a result, doctors hastily checked on patients and treated symptoms, not the actual illness.[6] Further, as the average American changes jobs and insurance plans every two years, the healthcare industry transformed into a system solely focused on short-term health to maximize profits.[3] While patients need personalized health care, the American healthcare system provides the bare minimum: a "one-size-fits-all" that, in reality, only works for the healthcare industry.[3] With this cycle of greed and corruption, patient care diminished.[6]

However, more recently, there has been a movement in the moral and commonsensical direction. Although it has been unable to reign in pharmaceutical prices and insure every American, the Affordable Care Act, which President Obama signed into law in 2010, is the most regulatory act on the American healthcare system and expansion of coverage since the Johnson administration passed Medicare and Medicaid in 1965.[6] Under the Affordable Care Act, executive salaries and insurance profits were cut as the act required insurance companies to spend 85% of their revenue on patient care. The Affordable Care Act also increased insurers' pushback against pharmaceutical companies demanding lower prices, banning lifetime insurance payouts, capping annual out-of-pocket spending at $6,850 per patient, and requiring maternal care coverage.[6] Many preventative tests were also made free under the Affordable Care Act to promote early detection.

Additionally, under the Affordable Care Act, the coverage of patients was expanded. Under the Affordable Care Act, children were allowed to stay with their parents until they were twenty-six years old. As a result, the uninsured American percentage rate dropped from 18% in 2013 to 11.9% in 2016. Furthermore, the Affordable Care Act is a lifeline for millions of Americans because it made it illegal for insurers to deny a patient due to pre-existing conditions, protecting over 100 million Americans with these conditions.[6] Unfortunately, while 20 million people gained health care coverage under the Affordable Care Act, over 25 million people still do not have insurance, and the Republican party aims to dismantle the act.[6] The Affordable Care Act must be protected and expanded to a universal healthcare system.

Type 1 Diabetes:

One of the innumerable classified pre-existing conditions in America is type 1 diabetes. Type 1 diabetes develops after the body's immune system destroys the pancreatic beta cells that produce insulin, which is a hormone that converts glucose into energy needed to live.[10] In this state, patients cannot produce insulin to break down and store the energy from carbohydrates for bodily functions. Instead, the glucose circulates in the bloodstream, dangerously elevating patients' blood glucose levels. If untreated with synthetic insulin, patients will most likely die due to diabetic ketoacidosis or another diabetic complication, such as a neuropathy. However, the same insulin that is needed to live can kill the patient if administered in an incorrect dosage (causing hypoglycemia). In addition to insulin administration, patients with type 1 diabetes must also continuously check their blood glucose levels to ensure their blood sugar level is not too high (hyperglycemia) or too low (hypoglycemia).

Hypoglycemia is when blood glucose is low (under 70 mg/dL); this can happen rapidly, within less than 15 minutes, and can happen at any time; the most typical causes are too much insulin or insulin delivery at the wrong time, a delayed, skipped, or smaller meal than usual, increased activity, or drinking alcohol without eating. When patients experience hypoglycemia, they will generally be pale, shaky, sweaty, anxious, weak, cold, hungry, drowsy, and disorientated. Patients may also endure an elevated heartbeat, blurry vision, headache, nightmares, or the inability to wake up. When patients are low, they must drink or ingest a rescue glucose source: juice, glucose tablets, gummies, glucose gel, etcetera. If this treatment does

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not work, and the patient's blood glucose level continues to drop, the patient can pass out and have a seizure (usually occurring around 45 mg/dL and under). When the patient is passed out, not alert, or unable to swallow, another individual must administer prescribed emergency glucagon to the patient and call 911 immediately. If left untreated or treated too late, the patient may die.[11]

On the other end, hyperglycemia is a possibly fatal condition when a patient with type 1 diabetes has high blood glucose. Hyperglycemia can also happen at any time: usually due to an insufficient amount of insulin, severe stress, too much food, dehydration, infection, fever, illness, or injury. When patients are high, they experience increased thirst, hunger, and urination; they can also experience fatigue, nausea, lightheadedness, weakness, itchy skin, blurry vision, and heavy breathing. If left untreated, patients' blood glucose levels can continue to rise, and they may enter a comatose state. To lower a patient's blood sugar, they usually must administer additional insulin. If patients are unable to lower their blood sugar, they can experience weight loss, ketones in the urine, and other diabetic complications.[12]

One of these diabetic complications is ketoacidosis, which develops more rapidly than other diabetic complications. Patients suffer from consistently elevated blood glucose levels and the lack of insulin or insulin action, which causes ketones to develop. Ketones are the liver's fatty acids released into the bloodstream to break down fat for energy (since the body is not getting it from glucose). High levels of these toxins (over 1.6 mmol/L) make your blood too acidic and can result in a coma or death.[13] The excessive level of ketones in the body poisons it, swelling the brain and causing organ failure. Diabetic ketoacidosis can kill untreated patients rapidly.[2] It is most common in patients with type 1 diabetes who lack access to adequate supplies of insulin. The condition is rare among patients with type 2 diabetes.[14]

Type 1 diabetes and type 2 diabetes are frequently put together as "diabetes." Such generalization is dangerous because it leads to misinformation, misdiagnosis, and loss of empathy for treatment-barred patients with type 1 diabetes. Type 1 and 2 diabetes are entirely different diseases. On a basic level, type 1 diabetes is insulin-dependent and currently incurable, whereas most people with type 2 diabetes can manage their insulin resistance with diet, exercise, and oral medications.[15] Type 1 diabetes is an autoimmune condition where patients do not produce insulin because their immune system destroyed the insulin-producing pancreatic beta cells. Type 2 diabetes is a metabolic condition that occurs when the body does not produce enough insulin for the patient's sum of consumed carbohydrates, or the patient is insulin resistant.[16] Unlike some patients with type 2 diabetes, all patients with type 1 diabetes need prescribed synthetic insulin to survive, which, as noted, is excessively expensive in America. This combining of type 1 and type 2 diabetes leads uninformed people, including some medical first responders, to ignore those dependent on insulin, degrading care and causing additional unnecessary suffering in America.[17]

Discussion

Cost: The Barring Expense of American Health Care:

While the United States ranks fourth best in "healthcare innovation" worldwide, our government has allowed healthcare industries to monopolize and continually raise already exceedingly high prices.[18] As a result, those of lower socioeconomic status cannot afford adequate care, and even for those with insurance, American health care is a financial burden. In fact, sixty percent of all bankruptcies in America are related to medical expenses.[19] In 2017, Americans spent $1,122 out of pocket, $4,092 privately, and $4,993 publicly on health care. In contrast, France, which spends the average amount among high-income countries, spent $463, $357, and $4,111, respectively.[20] American health care expenditures only continue to escalate. In 2018, the United States spent $3.6 trillion on health care. If continued at this pace, in 2028, it is projected that America will spend $6.2 trillion, which would be twenty percent of its GDP.[21] In contrast, France's total expenditure on health is only 11.2%.[22] Such stark escalations are unique, even within the American Economy. The healthcare service cost has grown faster than the cost of other goods and services in the US Economy.[22] Looked at another way, over the past twenty years, the Consumer Price Index grew annually at an average rate of 2.1%, while the Consumer Price Index for strictly medical care grew at an average rate of 3.5% per year.[22] Such high healthcare costs are not beneficial or sustainable. The United States, despite its significantly higher prices, has worse average life expectancies, obesity rates, infant mortality rates, and diabetes rates.[21]

For Americans with chronic conditions, even though America ranks first for "Science and Technology" worldwide, this obscene pricing is even more daunting.[18] A patient with type 1 diabetes with "good" insurance will still have to pay $2,500 annually on average. In fact, at least eight percent of insured patients with type 1 diabetes spend over $5,000 annually due to high deductibles and severe diabetic complications.[23] For uninsured Americans with chronic conditions, health care costs are unjustifiably insurmountable. An uninsured or inadequately insured American with type 1 diabetes spends at least $20,400 annually for their vital treatment, equipment, and care. For reference, in Germany, patients spend approximately $44 annually.[24]

Furthermore, the uninsured rate for those who are non-elderly is severely disproportional in terms of race. In 2017, 22% of Native Americans, 19% of Hispanics, and 11% of African Americans were uninsured.[25] These disparities only worsened; forty percent of the American Latino population were uninsured this past year, 24% of the Black population, and 17% of the White population.[26] Without regulation, the number of vulnerable uninsured patients in America continues to grow.

In 2019, 29.6 million Americans were uninsured.[27] In the first half of 2020, 43.4% of American adults from nineteen to sixty-four were uninsured or inadequately insured.[26] More so, throughout the COVID-19 pandemic, the number of Americans inadequately insured increased as many lost their jobs and their employer-based healthcare insurance along with it.[28] Fourteen-million six-hundred-thousand Americans

lost their health care coverage since the pandemic began in February 2020 to June 2020; no one lost care in Australia, Belgium, Canada, Chile, Denmark, Finland, France, Germany, Greece, Hungary, Italy, Japan, New Zealand, Norway, Poland, Portugal, South Korea, Spain, Sweden, Turkey, or the United Kingdom.[29] While The Consolidated Omnibus Budget Reconciliation Act (COBRA) can cover one's health insurance for up to a year into unemployment, the worker must still pay the premium of their past health insurance while being income-less. Undeniably, this still creates a severe financial burden, unmanageable for some families.[30] Fifty-two percent of uninsured Americans accumulated medical debt from 2019 to the beginning of 2020.[26]

When Americans fall into medical debt, which 137 million Americans did in 2019, they face severe financial problems.[31] In the past two years, 37% of Americans from ages 19-64 used all their savings, 31% took on credit card debt, 26% were unable to pay for basic necessities, 20% delayed education or career plans, 11% took out a mortgage against their home or took out a loan, and 3% declared bankruptcy.[31] Undeniably, the cost of medical care in America is paralyzingly expensive. Hospital and surgery costs comprise the most considerable portion of America's healthcare spending.[32] Hospital costs accumulate before a patient arrives: A standard ambulance can cost over $1,200, and an air ambulance, which is generally used when patients are in a remote location or critical condition, can cost over $200,000. The ER visit alone is $3,000, increasing to over $6,000 if one receives medications and must stay overnight.[32] For example, my hospital stay was $53,000 when I was diagnosed and hospitalized with type 1 diabetes.

Such obscene hospital pricing is a result of the combination of individual health circumstances, the patient's insurance, lab tests, x-rays, surgical procedures, operating room and post-surgical costs, food, medication, doctors, specialists' fees, overnight stays, equipment—including $7 Band-Aids—, lost wages, surgeons' fees, anesthesia, pre-surgery treatment, and miscellaneous costs.[32] For example, while an MRI needed for surgery costs $1,119 in America, it is only $215 in the United Kingdom.[32] Even with the "best" insurance, deductibles can still cause hospital bills to be extremely expensive.[32] A medical emergency is already life-changing and stressful; in fact, 40% of patients diagnosed with a chronic disease will develop a mental health disorder.[28] Seeking medical care should not destroy one's finances, especially during such a pivotal time in the patient's life.[33]

Normally, an endocrinologist discovers a patient has type 1 diabetes after a medical emergency, such as diabetic ketoacidosis. When first diagnosed, many patients are already hospitalized or need to be hospitalized to stabilize their blood sugar. This period is crucial because ideally, nurses, dieticians, doctors, and other newly diagnosed patients help the patient lower their blood sugar to a safe level, learn about their life-altering disease and how to treat it, and meet their first endocrinologist. The patient's life will never be the same again, and they must be adequately cared for and trained in these first days.

For example, when I was diagnosed with type 1 diabetes in August of 2019, my primary care physician sent me to Westchester Medical Center because my fasting blood glucose was over 350 mg/dL. I stayed in Maria Fareri Children's Hospital from August 16th to 20th. I was put on an IV, got various lab work, learned what type 1 diabetes was, and learned how to manage and monitor type 1 diabetes with basic blood glucose meters and insulin pens. I also met with two different endocrinologists, established my first insulin regimen, consulted a dietician, and went to group meetings with other recently diagnosed patients with type 1 diabetes. As a result, I was able to stabilize my blood glucose levels, learn how to manage and monitor my disease, and connect with endocrinologists.

However, my insurance company at the time, Aetna, refused to cover my hospital stay because it was not "medically necessary." Aetna's ophthalmologist considered my hospitalization unnecessary because I "did not" have diabetic ketoacidosis with acidosis and moderate ketonuria, a hyperglycemic hyperosmolar state with blood glucose over 600 mg/dL and neurological dysfunction, or severe signs of hyperglycemia, such as severe infection, severe electrolyte abnormality, unexplained fever, severe dehydration, or severe and persistent vomiting. This claim, which a specialized pediatric endocrinologist should have made, is incorrect because I had significant ketones in my urine, severe electrolyte abnormality, and severe dehydration. Due to Aetna's decision, my family had to pay for my $53,000 medical bill. We automatically appealed the denial, and they denied it again. My story is not unique .

Every year, insurance companies deny around two hundred million health care claims—one in every seven. This rate increases to one in four for patients with chronic illnesses.[34] Insurance companies deny care, hoping that patients will not have the time or stamina to challenge every denied claim, despite an apparent valid medical reason because they profit off premiums and copays and lose money when they pay out claims.[34] As a result of this profit potential, since 2011, insurance deductibles and premiums have increased at a disproportionate rate to American worker's wage increase: from 2011 to 2016, deductibles increased sixty-three percent, and premiums increased twenty percent, while worker earnings only increased eleven percent.[33] As a result, over 66% of Americans claim that their health insurance cost is a source of significant stress.[35] Simultaneously, in 2018, insurance companies made $23 billion in profits.[25]

Private insurance companies are not concerned with the long-term health consequences for their patients because, in general, people change jobs every two to three years, along with their insurance. Therefore, many insurance companies only focus on short-term means, keeping one out of the hospital and out of the emergency rooms because this is where they are charged the most amount of money, providing the bare minimum for their members.[3]

These insurance companies further their profit and worsen their members' financial status as they deny claims in broad categories without looking closely at a case's details.[34] For example, an auto-inflammatory chronic skin condition that is common for patients with type 1 diabetes, like Hidradenitis

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However, it is essential to note that, thankfully, the hospital absorbed my stay. Nevertheless, if they had refused to do that, or did not have the financial means to do so, my family would have been in a severe financial crisis.

Suppurativa, can be treated effectively with laser hair removal. However, insurance companies will automatically deny this medical treatment and label it as a cosmetic request. As a result, the patient will either absorb the bill themselves or not get the treatment done and continue to suffer. Insurance companies can deny treatment, labeling it "experimental," or demand that the patients try more generic treatments first before they cover the prescription, forcing patients to bear inadequate treatments until they can finally receive the correct one. Lastly, some insurance companies frequently deny, or barely cover, Durable Medical Equipment, especially for patients with type 1 diabetes, because the new, updated, safe, improving quality of life insulin pumps and Continuous Glucose Monitors (CGMs) are considered "luxury items."

Due to insurance denials, in 2019 alone, $8 billion was spent out-of-pocket by American patients on durable medical equipment.[36] Continuous Glucose Monitors, insulin pumps, and insulin pump supplies are all durable medical equipment. As a result, they are billed through the medical channel (not the pharmacy channel) and require the patient to pay their deductible and coinsurance until they reach their out-of-pocket limit.[37] Even worse, in 19 states and Washington DC, adult patients under Medicare and Medicaid plans deny CGMs and coverage for an insulin pump varies on the specific plan a patient has and the kind of pump the patient wants—but most end up choosing the pump their insurance company covers the most— because they are both expensive and considered "unnecessary" "luxury" items.[38] However, numerous studies have proven that insulin pumps and CGMs help lower a patient's A1c by at least 1% in under 24 weeks and improve the quality of life for the patient as they no longer have to fingerstick check throughout the day or use needles to administer insulin throughout the day.[39] As durable insulin pumps, like Tandem's, cost around $6,000, and Dexcom G6 CGMs' cost around $1,650 every three months, patients are left unable to receive such lifesaving and life-enhancing equipment.[3]

Furthermore, physician and clinical services comprise 20% of American healthcare spending.[32] Specialty physicians, such as endocrinologists, can cost over $450 per visit for a patient with "adequate" insurance, without any additional tests.[33] Undeniably, doctor visits are crucial to maintain a healthy life and avoid disease progression, but the barring cost of this care forces patients to skip their visits, eventually resorting to ER care. In fact, one in every six American adults avoids going to the doctor strictly because of cost.[40] Even worse, 44% of Americans skip doctors' visits because of cost.[41]

Unfortunately, even with a doctor's prescription, many prescribed medications and treatments are prohibitively expensive in America. For example, BAQSIMI, which is a lifesaving emergency glucagon nasal spray, costs $670. As a result, Americans cannot purchase potentially lifesaving prescriptions; in 2019, 37 million Americans did not fill a prescription because it was too expensive.[25]

Insulin is one of these excessively high-priced, lifesaving pharmaceuticals. Three insulin companies, Sanofi, Eli Lilly, and Novo Nordisk, comprise 80% of the world's insulin supply.[42] Sanofi increased the price of their Lantus insulin by 50% in 2014, despite being on the market for over a decade.[43] Since 2001, Eli Lilly's Humalog 10 mL insulin vials have risen 685% in price; on average, they are now $390.23 per vial.[42] On average, patients with type 1 diabetes need at least 3-4 vials of insulin monthly. Even worse, Humalog 50/50 KwikPens cost $709.19 for five 3mL pens.[44] Insulin only costs a few dollars to manufacture, yet insulin brands mark up their prices by 5,000%.[1]

Price increases like these are due to third-party pressure, shadow pricing, and the lack of competition and regulation—not, as often believed, for innovation and development costs. The declared benefits of a capitalistic system are not active in America's healthcare system due to monopolies' destruction of the free market.[45] As a result, beneficial competition, innovation, and cooperation cease, leaving unjustified price gouges in its absence.[46,47] Shadow pricing is a technique all three insulin companies have used. With this technique, when one brand increases their prices, the other brands immediately follow with the same increase; they have this ability because of their oligopoly on the pharmaceutical. For example, in 2014, Novo Nordisk increased its price of insulin by 11.9%, the exact same amount that Sanofi did less than 25 minutes earlier.[48] To increase profits, Eli Lilly followed in raising its insulin prices the same percent.[48] The uncontrolled American cost of insulin forces 26% of American patients to ration their insulin. Insulin-rationing patients experience 3x the number of dangerous, uncontrolled glycemic episodes than their peers who do not have to ration.[49] As Dr. Kao-Ping Chua, a pediatrician at the University of Michigan's C.S. Mott Children's Hospital in Ann Arbor, stated, "Insulin is the difference between life and death for patients with type 1 diabetes, and efforts to make it affordable are critical." [23]

In the past, these insulin companies have made minimal and overall failed efforts to lower the price of insulin in America. For example, in March 2019, Eli Lilly produced its generic insulin, Lispro, which was 50% cheaper than Humalog.[42] However, Elizabeth Warren and Richard Blumenthal conducted a nationwide survey, including 190 chain and 196 independent pharmacies, and discovered that Insulin Lispro was not widely available across the country. In fact, 83% of the pharmacies did not have it, 14 states did not have it at all, and 17 states only had it available in one pharmacy. 69% of the pharmacies who did not have the insulin stated they believed they would never get it if they reached out again. Even in the pharmacies that did receive the insulin, only 15% of these pharmacies offered Insulin Lispro without a patient's prompt.[42] Clearly, Eli Lilly's half-attempt at providing a more affordable brand of insulin in America was inadequate. Nevertheless, Eli Lilly made $5.48 billion in Quarter 3 of 2019 alone, and current CEO of Eli Lilly David Ricks earns $23.7 million annually.[42, 48,50,51] Undeniably, Eli Lilly has the financial means to lower their American insulin prices. While Novo Nordisk, Eli Lilly, and Sanofi provide free insulin to the impoverished through various forms of outreach, the working middle class are left without assistance.[52] The American government needs to hold Big Pharma accountable for the lives of all American people.

In addition, Pharmaceutical Benefit Managers (PBMs) contribute significantly to the opaque, skyrocketing price of insulin. PBMs work secretively, allowing little transparency into their manipulations of and contracts with the pharmaceutical industry.[48] CVS Caremark, Optum RX, and Express Scripts, which Aetna, UnitedHealth, and Cigna, respectively, now own, are the three prominent PBMs, controlling 80% of American drug benefits.[48] Due to their monopolistic control of the market, they are able to pressure insulin manufacturers into increasing the Wholesale Acquisition Costs (WAC) of insulin, which in turn increases patient's out-of-pocket spending, especially that of uninsured patients. PBMs also negotiate Price Protection contract terms to force a drug's annual increase in WAC over a certain percent, which usually ranges up to 12%.[48] Using exclusion risks, PBMs threaten the refusal of a manufacturer's product if they do not increase their WAC, refusing to stock a manufacturer's products, which would harm both the insulin manufacturer and the patients. However, they do this because the higher the WAC, the higher the gain in rebates and administration fees.[48] This pressure has intimidated insulin manufacturers into refusing to lower their WACs in fear of retaliation from PBMs.[48] PBM's efforts have become more aggressive since the passage of the Affordable Care Act, proving their prioritization of profits and ability to evade government regulation. This is a Pharma-wide occurence.[48]

Insulin is overpriced in America, and it is significantly more affordable in other developed nations. Insulin prices are over eight times higher in the United States than in thirty-two comparable, high-income nations combined. While the average American price per manufacturer's standard unit was $98.70, it is $12.00 in Canada, $7.52 in the UK, and $6.94 in Australia.[53] Further, for specifically rapid-acting insulins, the average American price is $111.39 per unit versus $8.19 in non-US countries.[53] While American students with type 1 diabetes have to decide between "paying for a class or a textbook or paying for insulin and medical supplies," it is not a concern for European students because of their universal healthcare systems.[54] In every other developed country, which all have a universal healthcare system, lifesaving pharmaceuticals are significantly less expensive than the same insulin in America and attainable for all people.

Undoubtedly, American health care is uniquely high-priced, affecting all patients, not just patients with type 1 diabetes; patients with innumerable other diseases, such as cardiovascular disease, Crohn's disease, COPD, and cystic fibrosis, agonize over America's costly healthcare system as well. As a result, Americans suffer to afford their treatments, and some are barred from care. Without adequate help and regulation from the government, monopolistic pharmaceutical companies and conglomerate hospitals produce obscene profits, while the American patient suffers.[3] Although the United States leads the globe in new medicinal production, comprising 57% of those created, their costs bar American patients from receiving these discoveries.[19, 55, 56] Rising health care costs have created an emotional and financial crisis for Americans.[19] The underinsured and uninsured are forced to skip doctor visits, surgeries, and prescriptions. Due to exorbitant health care prices, patients with type 1 diabetes must chase health insurance and health care benefits when searching for employment because they "cannot afford [their] supplies" without it.[54] Undoubtedly, America needs a personalized universal healthcare system.

Access: The Prohibitive Factors of American Health Care:

Location, socioeconomic status, and race diminish one's access to medical care. Based on where someone lives, they may not have access to quality care, especially if they live in rural or low socioeconomic urban areas.[3] Furthermore, even when someone has access to this care, they may face discrimination for their race or for being part of the LGBTQ+ community.[57]

Geography is critical for adequate treatment of type 1 diabetes in America. With low average incomes, geographic isolation, and a shortage of qualified health care providers, it is challenging for rural hospitals to deliver quality care, and it is near impossible for rural American patients to receive quality health care.[58] While the New York City and Westchester region is at the center of premier diabetes care, places such as rural Idaho have their closest, minimal diabetes center four hours away.[3] This ties directly with socioeconomic status as well; those who are impoverished or are in the working middle class generally live in underfunded city communities or rural areas, far away from the nearest city, where they do not have access to acceptable care.[28] These underserved hospitals cannot afford the expensive, lifesaving diagnostic equipment, so patients must travel vast distances to receive care.[58] Further, urban specialty clinics write over 90% of prescriptions for CGMs. So, if one lives in rural America, they are statistically unlikely to be prescribed a CGM because they lack the resources and knowledge to do so.[3] Even worse, some tertiary hospitals in areas such as the middle of rural North Dakota do not have an endocrinologist or pharmacist.[3]

A significant cause of this issue is that doctors, who accumulated significant debt from medical school, chose to practice in big cities because that is where they will get paid the most.[3] As a result, there are up to 300 physicians for every 100,000 urban dwellers, while there are only 55 physicians per 100,000 rural residents.[58] Due to such inadequate care, the State of South Dakota only meets 87% of all medical needs, and this percentage worsens to 48% and 37% in Bennett County and Shannon County, respectively.[58] In the Pine Ridge Reservation, there is one 45-bed hospital with 16 physicians that serves the entire 17,000+ Lakota population.[59]

In particular, Indigenous people lack adequate health care. Forty percent of the American Indigenous population in the northern plains live below the federal poverty line, and they have significantly greater death rates due to diabetes, alcoholism, unintentional injuries, preventable illnesses, cancer, and infant mortality than compared to the rest of the country.[51] Inadequate health care is a significant contributing factor. While the American government provides Native Americans on reservations health care through the Indian Health Service, Congress has underfunded the program, leading to insufficient health services and facilities.[60]

For example, the Nebraska-Iowa territory, home to the Winnebago and Omaha tribes, has one 13-bed hospital. The Winnebago tribe alone has 5,000 members. Due to insufficient

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care, Tori Kitcheyan's 45-year-old diabetic aunt died there due to overmedication from the hospital staff after she had several toes amputated at a different hospital over 20 miles away in Sioux City, Iowa as the hospital could not facilitate these measures themselves. Kitcheyan declared that their hospital is "the only place you can legally kill an Indian" due to such derisory care.[61]

Furthermore, due to the catastrophe of Native American Health Care and America's history, there is a significant distrust among the Indigenous population, especially among the Elders, toward modern, western medicine. For example, one tribal elder from the Navajo tribe, which has over 300,000 members, refused to touch a blood glucose meter because it had the "enemy's" blood on it—blood from a white male with type 1 diabetes.[62] During the decades after World War 2, the main food supply for the Navajo was government-supplied lard and flour, leading the traditional diet to include high carbohydrate fry bread.[62] Such poor nutrition, at the hands of the American government, is one leading reason as to why Native Americans have the highest diabetes prevalence in the country.[62] Currently, some elder Native Americans view modern medicine as "White Man's Medicine," reverting to traditional cures. While this works for a variety of illnesses, type 1 diabetes needs synthetic insulin. The struggle is to not only supply Indigenous people with quality, affordable health care, but also to educate them while respecting their cultural beliefs so the elder, current, and future generations of Indigenous people can feel comfortable and respected getting treatment.[62]

The difference in care between someone like myself, who lives in the center of American diabetes care and another pediatric patient with type 1 diabetes who lives in a rural or underserved, impoverished urban center is obscenely inequitable. When patients live far away from their primary care physician or endocrinologist, they do not have time for a long and detailed visit that provides all the needed social, dietary, research, and lab work. Also, if their parents both work and do not have time to bring their children to their visit, crucial appointments with their endocrinologist may be skipped altogether.[28] In rural areas, this is especially a problem in the winter. Hilly, snow-covered terrain and dangerous winds make it impossible to travel.[58] As a result, patients who lived in underserved areas are less educated and less supported in managing their type 1 diabetes.[28] All this elevates their A1c's, lipid and blood pressure levels, and lowers their resilience to other diseases.[28] While I still struggle greatly with type 1 diabetes, another child with type 1 diabetes with low socioeconomic status is four times more likely to die than I am.[63]

Another significant factor that causes improper treatment for patients is racial discrimination. Racial disparities in health care are apparent.[54] For example, Black women with advanced degrees who make over six figures still bear worse health outcomes than white women who never graduated from college.[50] In fact, racial and ethnic minorities are less likely to receive adequate treatment compared to their white peers as they have lesser access to insulin and diabetic durable medical equipment, like insulin pumps and continuous glucose monitors.[54] As a result, the average A1c of an African American child is 10.7%, and for a white child, it is 8.5%.[64] Pediatric black patients die twice as frequently as white and Hispanic children due to their type 1 diabetes.[65]

Implicit bias is at the root of this discrimination. For instance, nurses and doctors may not treat patients of color the same way they treat white patients.[30] In fact, some doctors ask women of color minimal follow-up questions and dismiss clear signs of a stroke or blood clots.[57] As a result, physicians of color tend to communicate more effectively with patients of color because implicit bias is reduced, and communication is enhanced.[30] Additionally, White children with type 1 diabetes are twice as likely to start using a CGM and four times as likely to continue using a CGM than Black and Hispanic children.[66] The inequality is apparent.

The LGBTQ+ community also faces severe health care disparities. Transgender individuals need specialized care and insulin regimens to compensate for their hormone irregularities, especially during their transition, yet some endocrinologists do not accommodate such needs. Some discrimination is even more blatant against the LGBTQ+ community. For example, an endocrinologist in San Francisco told his gay patient with type 1 diabetes that "every low he got, he'd deserved because he was gay.[67]" Such discrimination increases stress and anxiety and deters treatment, worsening one's A1c.[67]

Additionally, according to Sue Gerry, Westchester Medical Center's Senior Vice President for Strategic Alliances and Partnerships, many immigrants who are impoverished or homeless also do not feel welcome due to fears of discrimination, the questioning of their legal status, and other financial struggles they already face, such as rent, electricity, or grocery bills. As a result, many tend not to seek care, worsening their condition, usually leading to a severe ER visit.[57] As many immigrants are undocumented, receiving adequate health care is even more challenging.[57] Due to this, immigrants and ethnic minorities have higher HbA1c, morbidity, and mortality rates.[68]

Immigrant families also experience increased rates of unemployment and reliance on social welfare services as these families may lack shelter stability and food security, have lower education levels, larger families, and higher rates of single-parent households. Additionally, many immigrant parents have a language barrier making it difficult for them to communicate with their child's doctors or understand key medical terms, increasing the risk of complications. For example, Spanish-speaking families in the United States have increased stress, less strict insulin regimens, and worse glycemic control.[68]

Unfortunately, the COVID-19 pandemic only worsened disparities in pediatric type 1 diabetes in America. Especially seen in cities such as Philadelphia, the coronavirus pandemic furthered disparities because families must care for their children intensively while balancing their daily schedules.[69] Also, as many parents of lower socioeconomic status lost their jobs, they lost their medical benefits and insurance. The coronavirus pandemic undeniably proved that health care coverage should not be linked to one's job.[28] To make matters worse, as schools shut down, many children lost access to healthy meals and insulin.[69] Further, the pandemic made it even harder to safely schedule a visit with an endocrinologist, especially since some

patients cannot even afford the internet and a phone to facilitate telehealth.[69] Without the prescription, guidance, time, or money to get insulin and other vital type 1 diabetic supplies, those of lower socioeconomic status have suffered at significantly higher rates during the COVID-19 pandemic.

Active Efforts:

Non-government organizations in America help decrease inequities among patients and advocate for a more universal approach to health care.

Many activist groups, like the Right Care Alliance, have orchestrated protests to lower the price of insulin.[70] The Right Care Alliance is a Massachusetts-based grassroots coalition that believes health care is a human right and that the American people need to reform their healthcare system to value patients, not profit. Clinicians, patients, and community members comprise the organization, striving to hold America's healthcare industry accountable, provide full transparency for informed and empowered decision-making, and create a healthcare system based on science and need, not market influence.[70] Their most notable protests against the price of insulin in the United States include the May 2018 Mother's Day Cards Delivery to Sanofi, the November 2018 Ashes of the Dead Delivery to Sanofi, the March 2019 Gravestone Delivery to Sanofi, and the November 2019 Blood Money Protest at Eli Lilly.[70] Mothers of young adults who died from insulin rationing led the May 2018 Mother's Day Cards to Sanofi protest and delivered a five-foot card with 5,000 signatures and names of mothers who lost children due to insulin rationing to the Sanofi offices in Boston.[70] Other mothers wrote letters to the specific insulin company that was responsible for their child's death. The Right Care Alliance held this protest in 8 cities across the country.[70] On November 16th, 2018, during the Ashes of the Dead Delivery protest, over 85 patients, students, clinicians, and activists united in calling for lower insulin prices. Parents of children who died due to insulin rationing left their children's ashes at the doorsteps of the Sanofi headquarters. In March 2019, protestors during the Gravestone Delivery protest delivered six gravestones, each dedicated to a young American who had recently died due to insulin rationing in America.[70] Protestors gave eulogies, rang chimes, and raised awareness. During the November 2019 Blood Money Protest in Cambridge, Massachusetts, families of those with children who died due to insulin rationing poured theatrical blood on money bags to honor their loved ones and to highlight the nation's greedy and murderous healthcare system. One father, whose daughter died on Christmas Day 2018, spoke: "I will never forget seeing the Christmas tree with the presents underneath it that would never be opened.[70]" These protestors also parodied This Land is Your Land with the lyrics, "our diabetes, we have been crippled, we're forced to ration, and we are dying, Pharma doesn't care for you and me.[70]" In response, Boston physicians declared an insulin crisis, and patients with diabetes publicly shared their daily struggles. As a result of these moving protests, there is greater public awareness about the price of insulin and expanded news media coverage, pressuring government officials to act, and politicians such as Senator Bernie Sanders and Senator Elizabeth Warren vigorously campaigned in 2020 in support of this effort.[70]

Additionally, non-profit organizations such as Beyond Type 1, JDRF, and the Helmsley Charitable Trust partnered together to power GetInsulin.org: an online program, provided in English and Spanish, that helps patients discover how they can get affordable insulin with specific steps and instructions, alongside coupons for the insulin, which Eli Lilly, Novo Nordisk, and Sanofi partly fund.[71] First, a patient will answer questions related to their location, income, insurance type, and prescription. Then, this site gives the patient their customized action plan, guiding them to solutions to best serve their specific circumstance. If someone is in urgent need of insulin, they can select the "GET URGENT INSULIN SUPPORT" tab to get insulin quickly by placing them in contact with an insulin manufacturer's solution center.[71] As the CEO of Beyond Type 1, Thom Scher, stated, "Insulin is not optional for people with diabetes. The current drug pricing system that leaves many unsure of how to access their insulin needs to change, and that change will take time. GetInsulin.org is designed to address this immediate and solvable problem—to simplify the process of getting people to the right help and getting them access to insulin in the immediate term.[72]"

Although GetInsulin.org has only recently started its service, it has already begun to make a profound difference in insulin affordability in America. Since its launch, GetInsulin.org has reached over 172 million people across all media platforms.[73] With its growing outreach, thousands of patients generate action plans with affordable solutions for themselves every week. It is expected for these numbers to continue to grow as time passes.[73] Proving the necessity of outreach, approximately 30% of GetInsulin.org users go straight to the Urgent Insulin Support page, as opposed to the Action Plan page; this exemplifies how many users are desperate for immediate insulin support.[73] Undeniably, while GetInsulin.org is an immediate and temporary solution, the program's work saves lives in the American government's virtual absence.

Even so, Getinsulin.org is only a temporary solution for immediate relief; the American healthcare system needs reform. While this is in no way the endpoint, this program is a vital step towards affordable, quality pharmaceuticals for all until America reduces insulin prices and provides universal health care.[54]

In addition to GetInsulin.org, the Helmsley Charitable Trust supports rural healthcare systems through telehealth, starting in 2010 in the rural Upper-Midwest.[3] With telehealth, rural healthcare patients can contact qualified doctors and get prescriptions without traveling miles. These patients can either connect through a local, smaller health facility or use their own network and device from home while saving money. Telehealth is less expensive than a routine doctor visit as the patient is not required to pay facility fees.[19] The foundation's EndoEcho project, stemming from the University of New Mexico Health Sciences Center, virtually connects areas that lack sufficient local medical resources, primarily underfunded rural areas, to advanced urban health centers, so patients with type 1 diabetes can consult with qualified endocrinologists to monitor, treat,

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and care for their diabetes as if they were treated in the center of diabetes care, despite their remote location. The program also reaches out to each patient weekly for a specialized check-in and holistically cares for the patient as they set them up with other services, like prenatal care and counseling.[58] As a result, patients' levels of stress, anxiety, and depression decrease, which also lowers average Hb A1c.[58] EndoEcho is free due to grants from organizations such as the Helmsley Charitable Trust.[58]

The Helmsley Charitable Trust has proven that telehealth is beneficial for patients' health. In 2017, they created a virtual specialty clinic with 35 people in their pilot study. A primary care physician saw these patients. While these patients previously did not know what a CGM was, the physicians virtually onboarded them to a CGM and taught them about the various CGMS.[3] After three months of the virtual clinic, every participant felt more comfortable controlling their diabetes and lowered their A1c by at least 0.5%.[3]

During the pandemic, numerous doctors across the country switched over to telehealth to continue to provide care while complying with COVID-19 precautions, and it was a profound success.[3] With the widespread utilization of telehealth, medical providers have shown its benefits to further equity. The pandemic has forced the significant acceleration of the medical field's acceptance of telehealth. Before, many states had laws restricting telehealth across state lines. Now, there has been reimbursement for many health features like telehealth and remote prescriptions.[3]

Telehealth should be made available across the country for all Americans. Fully subsidized telehealth nationwide is essential; this would include developing a digital infrastructure that ensures telecommunication for even the most remote regions of America. A universal telehealth system could connect patients to doctors regardless of socioeconomic status or location.

Similar to non-profit organizations, non-profit hospitals, such as Westchester Medical Center, have facilitated medical outreach to care for as many patients as possible. Susan Gerry, the Senior Vice President for Strategic Alliances and Partnerships for Westchester Medical Center, stated that "if we are a sick society, everyone loses," and because of this, it is vital that everyone receives adequate care and feels welcome.[57] A few years ago, a medical-legal partnership began in hospitals, like Westchester Medical Center, across the country. Through this system, a legal aid attorney was in the hospital's lobby to help protect patients facing eviction due to their medical bills.[57] Westchester Medical Center also works diligently to represent the LGBTQ community, all races and ethnicities, and those of varying disabilities.[57] To further this, they also require special training and awareness for all clinicians and staff to ensure they are a respectful community towards all.[57] They also ensure that everyone, despite a language barrier, has access to quality care as they accommodate Spanish-English translation for immigrants and their caretakers.[57]

However, their outreach's longevity is uncertain as the healthcare industry is still a "big business.[57]" When there is a lack of funding, these "unnecessary," yet lifesaving, community efforts and accommodations are removed from the budget.[57]

Undeniably, it should not be outside organizations' and individuals' responsibility to advocate for and provide equitable health care to all in America. It should be the government's duty to provide health care. Like every other developed nation, America must implement a universal healthcare system.

Universal Healthcare:America's need solution:

Despite the myths that try to complicate the matter, Universal Health Coverage is simply universal access to high-quality, affordable health services. It is evident that the current American healthcare system is significantly flawed; America spends more per person on health care than any other country.[74] However, America can provide greater health equity and reduce costs. America, the only country out of the 33 developed nations that does not have a universal healthcare system, needs a long-term, government-run healthcare system to ensure that every American has the right to adequate health care.[75] Education is critical for widespread acceptance of this crucial system to counter the current propagated myths.

One of the many American myths revolving around universal health care is that the American healthcare system is the best worldwide because it provides the best health care available. While many politicians and businesses who profit from America's healthcare system, such as American businessman and US Senator Ron Johnson, declare that the American healthcare system is "the finest healthcare system in the world," it is not.[76] In fact, the American healthcare system ranks 37th worldwide.[77] As the only developed nation without a universal healthcare system, the American people would benefit from learning from foreign examples.

Additionally, another myth plaguing the American healthcare system is the wait time to see physicians. In reality, physician wait times in France, the United Kingdom, and every other developed nation—all of which have a universal healthcare system—are not longer than those in America. For example, in Australia, doctors can see 67% of patients within a day of their initial request, whereas this rate is only 51% in America.[78] Additionally, only 11% of Australians have difficulty getting specialty tests, versus America's 30%.[78] Clearly, the expansion of patients' rights to receive health care does not diminish the rate at which doctors can treat patients.

America can facilitate this change. For instance, according to Health Policy Analyst Thomas Waldrop, while Massachusetts's wait time increased slightly after they expanded Medicaid in 2006, this did not affect their quality of care, and it lowered their percentage of uninsured patients to only 2.8%. Eventually, their wait times actually decreased after they fully adjusted to their new healthcare system.[78] The initial increase in wait time was a surmountable and predictable effect of changing the system. Like any change, patience is necessary for adjustment, allowing more Massachusettsans to receive lifesaving health care.

Another significant myth in America is that doctors in universal healthcare systems are underpaid. However, a government-paid General Practitioner in London, can earn the equivalent of $120,000 to $200,000 USD.[79] These doctors earn income based on how well they improve their patient's health. For example, through the UK's National Health Service

(NHS), if a doctor can stop their patient from smoking, lower their blood pressure or cholesterol, or treat their mental or physical condition, they are paid more. As a result, this healthcare system incentivizes doctors to do what is best for their patients. Under universal healthcare systems, more patients can receive health care, more patients can improve their health, and doctors are still receiving substantial salaries. In fact, one London doctor modestly commented that doctors in the UK live "very comfortably" and never have to reject a patient based on their socioeconomic status.[79]

Finally, one of the most prevalent and incorrect American myths surrounding universal health care is that taxes are agonizingly expensive. However, the majority of Canadian taxpayers are not upset with their taxes going towards their healthcare system. As one conservative Canadian explained, they "look out for" each other because they believe that there are people "who are not in the position" to afford their own medical bills yet deserve their vital health care. They know that their fellow Canadians "would do the same for them" if they needed medical support financially. In fact, "in Canada, it doesn't matter what political party [one is] affiliated with… healthcare ought to be universal.[79]" They also believe that the medical costs in a capitalistic healthcare system would be more expensive than their taxes.[79]

Despite the plethora of American myths surrounding universal health care, with further education and time, universal health care would provide further health equity in America. The United Kingdom, Australia, Singapore, Sweden, and France have hybrid healthcare systems, meaning they combine elements of a single-payer system and a private insurance mandate system.[80] While each of these developed countries has its own specifically tailored universal healthcare system, the United Kingdom's and France's universal healthcare systems are especially noteworthy.

For example, the United Kingdom has a complex and successful socialized medical system focused on patients' health, not profit. The government owns the health facilities and employs professionals, providing anyone under 16 years old or over 60 with free pharmaceuticals. Others pay a maximum of $7.78 for their pharmaceuticals. In addition, there are copay waivers for children, seniors, the sick, and those with certain conditions, resulting in nearly 90% of prescriptions being free.[80] The UK is able to regulate such pharmaceutical pricing due to its universal healthcare system. Their government has the power to negotiate with pharmaceutical companies to reduce their prices to reasonable figures. In addition, their pharmacies only sell medical treatments: not additional candy, toys, or other excessive consumer products. The NHS manages its healthcare system, covering preventative, hospital, physical, some dental and vision, mental health, palliative, rehabilitation, and home care, while private insurance covers elective surgeries.[24] Hospitals do not even have a billing department.[79] Despite advanced coverage, all funding comes from general taxes and dedicated payrolls: All patients can receive their treatments and care, and no patient stresses over medical expenses.

Further, France's healthcare system is a role model for every nation. Having a government-financed universal healthcare system, "Social Security," since 1945, France has the highest-ranked healthcare system in the world, spending less on health care while producing better outcomes than the United States.[77] Their patients have better access to primary care and proper hospital stays.[81] In fact, French citizens get affordable health care coverage from birth.[81] Anyone living in France, citizen or not, has access to health care with low copays, reimbursing approximately 80% of medical costs.[26] Further, their system covers every health care provider in the country, and every provider must accept every potential patient.[81] In addition, if necessary, France also provides voluntary supplemental insurance for extra services. As a result, patients, regardless of financial status, can receive medical treatment without financial burden. Through France's organized system, the French Parliament decides on an annual healthcare budget; their healthcare system legally requires absolute price transparency, has the bargaining power to keep prices low, and ensures there is no waiting list or necessary approval for specialized treatment.[81] To keep this comprehensive and inclusive system organized, every French citizen has a Carte Vitale card to inform their doctor of all of their medical information and history.81 France serves as a clear example that a universal healthcare system is not only adequate but superior to America's current model.

It is no wonder so many Americans move to other countries for affordable health care. For example, Katie West, a thirty-year-old with type 1 diabetes, went to Germany for graduate school and decided to move there permanently: She can now afford her insulin and other diabetic supplies. While she acknowledges that her taxes are slightly higher in Germany, she believes it is worth it as she no longer has to fear for her life. Katie West believes that there is no reason for her to return to America: "Why would I go back? It's thousands of dollars a year I'm going to have to spend on the same [insulin] I get here for nothing…[Here,] I don't have to worry.[24]" Undeniably, as a result of America's costly healthcare system, patients like Katie West are immigrating to other countries to afford their lifesaving medications.

Unfortunately, Katie West does not have a unique story. For instance, after discovering a cancerous tumor, Alexis Crémant had to return to his native country, France.[79] He could not afford to live in America. Additionally, an American man with type 1 diabetes who moved to Paris explained that he received personalized, superior care for his condition in France instead of additional medical expenses like he had experienced in America. Further, another American with type 1 diabetes, Elizabeth Pfiester, went to the UK for her master's degree and decided to permanently move there to afford her medical care and treatment.[82] She explains, "If I did have to go back, I would be terrified," due to the unaffordable costs of necessary care and prescriptions such as insulin.[82] Through West, Crémant, Pfiester, and countless others, it is apparent that the American healthcare system denies patients the care they need to survive, forcing them to relocate. Medical expenses in America are so barring that people must leave the country in order to survive.

While a fully paid Medicare and Medicaid and an expanded Affordable Care Act should economically ensure proper funding for equitable health care, pushback from conservative

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Americans call for further state liberty to allow state-self-determination of healthcare laws, causing further disorganization. While some states decided to expand their Medicaid coverage, other states refused to do so, leaving low-income, working Americans without health care.[30]

Further, the American healthcare system is not consistent across state lines due to such state discretion. For example, a resident under Medicaid in New York can only get emergent health care fully covered in New Jersey. If this resident wished to get non-emergent care in New Jersey, they would most likely have to cover the total cost of their care.[30] Furthermore, if a patient were to move residencies across state lines, they would have to reapply for Medicaid. Due to interstate inconsistencies, patients may be eligible in one state but not in another state.[30]

A combination of federal and state cohesion is necessary to provide affordable, adequate, and equitable health care in America. While the state has the best opportunities to represent their residents' needs, the federal government provides the needed national unification of the healthcare system.[30] According to Dr. Sean Nicholson, a Research Associate at the National Bureau of Economic Research, a Cornell professor, and the director of their Health Administration Sloan Program, greater federal involvement will ensure proper funding for equitable health care within the American healthcare system, bringing more insurance guarantees and mandates lessening state discretion.[30] In fact, through this proper funding, taxes would not change for the average American. According to Senator Warren, instead, the money currently spent on private insurance would go directly towards the universal healthcare system. Any additional money needed would come from big corporations, Wall Street, and the top 1%: all of which can easily afford this.[25]

Ultimately, America can, and must, transfer to a universal healthcare system. According to Dr. Nicholson, accurately and transparently educating the American public about universal health care is crucial for its implementation and success because many Americans are misinformed about universal health care.[30]

However, the key to developing America's best universal healthcare model is experimental implementation. While it may take time for Americans to fully embrace a universal healthcare system, starting with an optional Medicare plan open to everyone would serve as an actionable option to prove its functionality.[30] Due to America's diversity and size, a solid beginning could be to mirror Japan's or Germany's healthcare systems where the government pays for most of the patient's premiums, and the patient decides between a variety of private plans to ensure they get the plan that best fits their specific needs, or it could be to mirror France top-ranked hybrid healthcare system.[30] It may take five to eight years of observing a Medicare public option program before fully implementing universal Medicare.[30] Due to America's unique characteristics, a unique healthcare system is necessary. Starting with a demonstrative, optional Medicare program allows America to adjust as necessary to the changes to their healthcare system while instilling public trust that the system is fully functional. Since America is large and diverse, it is vital to be patient and meticulous with this transition to ensure that the process occurs proficiently. As time passes, Americans will have become educated about universal health care and confident in its capacity. By this time, the American healthcare system will be able to adjust as necessary and eventually switch over to their unique, specifically tailored, and truly universal healthcare system. When this occurs, America will be able to control pharmaceutical prices and other treatment costs, like every other developed nation, to end the obscenely excessive expenses of the current American healthcare system.

Conclusion

A universal healthcare system would better American society. America has already socialized many aspects of society, including the postal service, educational system, libraries, the police force, and the fire department; the American healthcare system must follow suit.[57] A universal healthcare system would help bring the needed, cost-effective, high-quality, equitable, and just care to everyone in America, preventing further unnecessary suffering, all while saving money. With this national unity, the American government can negotiate lower pharmaceutical prices and provide free health care to all people, bettering America as a whole. Access to affordable and adequate health care should be a human birthright, no matter their residential or financial status, but this is not America's reality, yet.

Undoubtedly, it is time for dire change. Seventy-one percent of Americans in a 2019 Gallup News poll said that the nation's for-profit healthcare system is in a "state of crisis" and "has major problems.[43]" Too much suffering has transpired; it is critical that America reconstructs its healthcare system to prioritize patients. As Tiana Cooks, the community manager for Beyond Type 1, stated, "A United States where we all have insurance, and nobody is denied access to it is the United States that I would fully support.[54]" America must acknowledge its faults, overcome the "money-reluctant" business tycoons possessing the healthcare industry, educate its citizens, and implement a universal healthcare system.[30]

Undeniably, the future of the American healthcare system contains significant experimentation and patience: trying the Medicare public option or trying a statewide model and adjusting it accordingly. However, with this incremental innovation, America will be able to see how a universal healthcare system works and find which model works best for everyone.[30] While reform may take five to eight years, this is not necessarily a bad thing; since the American healthcare system is massive and must contend with challenges that are unique to this country, having patience and taking the time to educate Americans with real-life examples and to make careful, thoughtful decisions helps ensure a working, just healthcare system for everyone living in America.[30]

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