
HWCOM Student Publications

2023

Healthcare in Action Fellowship [2023]

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Recommended Citation
George, Shebin; Khan, Rafey; Suarez, Richard; Fuentes, Patricia; Guedes, Jeremy; Nichols, Domonique; Perez, Sophia; and Dholakia, Devika, "Healthcare in Action Fellowship [2023]" (2023). *HWCOM Student Publications*. 2.
https://digitalcommons.fiu.edu/hwcom-studentpubs/2

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Healthcare in Action Fellowship

Florida International University HWCOM
2023

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Preface

The Florida International University Herbert Wertheim College of Medicine's Healthcare in Action (HIA) Fellowship is an experiential learning opportunity in collaboration with FIU in DC designed to educate medical students on healthcare policy making and leadership at the federal level. The highlight of the fellowship includes a 2-day fly-in to Washington D.C. where students have the opportunity to interact and learn from various stakeholders that influence health policy including federal agencies, think-tanks, lobbying groups, and non-governmental organizations. This year's inaugural trip included talks with the American Medical Association, Alliance for Healthy Policy, Joint Commission, CATO Institute, Public Citizen, and National Institute of Health. Fellows also had the opportunity to visit the congressional offices of Rep. Darren Soto (FL-09) and Rep. Gus Bilirakis (FL-12) to discuss legislative action on healthcare reform and share perspective on current challenges and future goals. The fellows selected for this trip are a vibrant and diverse group of medical students who share a passion for healthcare policy and are interested in assuming leadership roles during their medical careers. Each fellow authored a research brief pertaining to their own personal healthcare policy interest, and the culmination of their work is provided in this document.

The Diabetes Disaster: A Call to Curb the Price of Insulin

Rafey Khan and Shebin George

Purpose

Diabetes mellitus is a chronic condition caused by the inability to develop or respond to insulin, a protein that regulates blood glucose (sugar) levels. Over 28 million people were diagnosed with diabetes in 2019, which constitutes 8.7% of the United States (US) population.[1] Rates appear to be even higher in Florida where over 2 million patients, 12.5% of the adult population, have diabetes.[2] While therapeutic management includes lifestyle modifications and glucose metabolism altering products, insulin serves as a crucial aspect for medical management. Current estimates suggest that insulin usage increased from 1.6 million in 2007 to 3.3 million in 2020 amongst Medicare Part D enrollees.[3] Problematically, this doubling in insulin usage was associated with a quadrupling in out-of-pocket spending during the same period, with an increase from $236 million to $1.03 billion.[3] The price of insulin continues to be a debate across the political spectrum, however, at the heart of the matter is a public health crisis as diabetes is the 8th leading cause of mortality in the US.[4] The purpose of this research brief is to contextualize the rising price of insulin, assess current policies that aim to curtail out-of-pocket cost incurred on patients, and promote the adoption of price caps on insulin in the state of Florida.

Key Findings

- Over 28.7 million people in the Unites States have a confirmational diagnosis of diabetes.[1] The total number of people with diabetes is further increased when factoring in patients without a confirmatory diagnosis. This includes 21 million people under the age 65 and 16 million people above 65.[1]
- Insulin is a crucial component in the medical management of diabetes, however, 16.5% of diabetic insulin users ration their dosages due to costs.[5]
- Poorly controlled diabetes increases the risk for complications such as cardiovascular and kidney disease, diabetic retinopathy with subsequent blindness, and neuropathy.[6] These factors are leading causes of mortality amongst those with diabetes, which itself is the 8th leading cause of mortality in the US.[4]
- The recently enacted Inflation Reduction Act will cap the monthly cost for insulin product at $35 for Medicare Part D and B beneficiaries starting in 2023.[3] While this is crucial in alleviating cost amongst the elderly diabetic population, legislation at the state level is needed to support patients under the age of 65.
- Floridian bill SB 786 was introduced in 2021 to cap the 30-day supply of insulin to $100 for patients enrolled in an individual or group health insurance plan or health maintenance organization (HMO), however, it failed in subcommittee.[7]

The Scope of Diabetes

Diabetes mellitus continues to be a public health concern at the national and state level. In 2019, over 37 million individuals suffered from the condition, whether diagnosed or unknowingly, across the US.[1] The prevalence of adult diabetes significantly increased from 2001 to 2020, with prevalence estimates of 10.3% and 13.2%, respectively.[1] This change may be associated with improvements in disease outcomes due to beneficial developments in management, as the incidence of diabetes during the same period remained about the same.[1] In Florida, diabetes affects about 2.5 million patients with over 148,000 receiving the diagnosis annually.[2] The burden of disease is not spread across the socioeconomic spectrum equally, as disparities exist amongst those with lower educational attainment and income.[8] These populations not only experience a higher prevalence of disease but also suffer worse outcomes measured by all-cause mortality.[9] The elevated blood glucose level in those with diabetes precipitates complications including cardiovascular and kidney disease, retinopathy which can progress to blindness, and disorders in the peripheral nervous system.[6] Recent data has shown that patients with diabetes have a 10% higher all-cause mortality than those without the condition.[9] Cardiovascular disease appears to be the largest contributor to mortality, accounting for 70% of diabetes-associated deaths.[9] Beyond the human impact, diabetes carries a significant financial burden on the economy. Estimates from 2017 report the costs of diabetes as $403.9 billion annually, accounting for about 2.1% of the US gross-domestic product.[8] Given diabetes's broad prevalence across the US, risks to morbidity and mortality, and pressure on the US financial system, it is paramount to assess barriers to treatment, with this brief focusing on insulin.

Rising Insulin Cost and Causes

Patients with diabetes have reduced ability to synthesize or respond to endogenous insulin. In cases of complete insulin-loss or remanent insulin sensitivity, the use of exogenous insulin can be critical for controlling blood glucose levels. Amongst the over 30 million patients with diabetes, 7.4 million utilize at least one formulation of insulin to manage their condition.[10] Current evidence suggests that insulin usage has doubled and out-of-pocket spending has quadrupled from 2007 to 2020.[3] Within the Medicare Part D population in 2020, the average cost per prescription across all insulin products was $54, a 39% increase from 2007, and average annual out-of-pocket spending on insulin was $572, a 76% increase from 2007.[3] This finding was also discovered in privately insured patients with reports indicating a 54% increase in personal insulin spending between 2005 and 2017.[11] The increased out-of-pocket cost annual growth exceeded that of inflation, suggesting that other factors are also responsible for rising cost of insulin.[3,11] The American Diabetes Association engaged in a working group to ascertain the causes behind increasing insulin prices in the United States.[10] The group determined that high list prices, the price declared by manufacturers for medications, harm diabetics financially as these costs directly influence the price they pay for insulin.[10] In fact, the average list price for insulins approximately tripled from 2002 – 2013 and increased annually by 14 – 17% from 2012 – 2016.[10,12] The supply chain for insulin is immensely complex, but notable entities that are partly culpable for the increasing list price of insulin include pharmacy benefit managers (PBMs).[10] PBMs act as the intermediary between drug manufactures, pharmacies, and health insurance companies by influencing the cost-sharing tier and utilization parameters for a certain medication.[10] Drug manufacturers pay fees, use price concessions, or offer rebates to PBMs to have their pharmaceuticals placed on a low-cost sharing section of a health plan working with the PBM.[10] In addition to influencing the list price, this practice by PBMs allows them to directly leverage which drugs are available to patients and at what price, highlighting their role in insulin access and affordability.[10]

The pressures posed by increasing medication costs are forcing diabetic patients to make the choice between paying for their insulin or spending on other necessities.[10] Unfortunately, 16.5% of diabetics on insulin ration their doses due to costs and delaying purchase.[5] This practice of non-adherence to the prescribed insulin regiment increases the risk of hyperglycemia associated complication in both the short- and long-term. In fact, patients with poorly controlled diabetes are associated with insulin usage.[13] Patients that fail to regulate their diabetes are associated with socioeconomic and cost factors, suggesting increases in insulin prices may mitigate a patient's ability to access the medicine needed to curtail their blood glucose.[14] Patients should not be put in a position where they must sacrifice their health, and sometimes their life, because they are unable to purchase insulin. This trend has sparked both political mobilization and contention across the levels of government in the US.

Policies to Curtail Insulin Prices

In 2003, the Medicare Prescription Drug, Improvement, and Modernization Act (MMA) introduced outpatient prescription drug coverage to Medicare Part D.[15] While the passage of this law provided Medicare enrollees coverage for numerous drugs through the government sponsored program, it included a "noninterference" clause which prevented the Human and Health Services (HHS) secretary from negotiating with drug manufacturers, pharmacies, and prescription drug plan sponsors to set drug prices.[16,17] The MMA restricted the government's ability to reduce medicine cost, including that of insulin, because it gave providers unrestricted ability to set list prices for pharmaceuticals. Congress failed to enact substantial policy to ameliorate this shortcoming for almost two decades until the Inflation Reduction Act was passed in August 2022.[15] The Inflation Reduction Act included a drug reform provision that altered the non-interreference clause by allowing the HHS secretary to negotiate the prices for a few drugs covered by Medicare.[16] Cost reductions will begin in 2026 for Part D and 2028 for Part B beneficiaries.[16] While the specific drugs that are going to be included in this provision will be deliberated in 2023, they will likely include medication that contribute the most to Medicare spending, one of which includes a long-acting formulation of insulin (glargine).[15] Furthermore, the Inflation Reduction Act will penalize pharmaceutical manufacturers with prices increases that exceed that of inflation, reduce out-of-pocket spending for Medicare Part D beneficiaries, and implement price caps on insulin products starting in 2023.[15]

Increasing drug costs in the US has received widespread scrutiny by policymakers but the rising price of insulin has been a specific concern by legislators that has seen intervention prior to the Inflation Reduction Act. To curtail the cost inflicted on diabetic patients with Medicare Part D, certain plans participated in an Innovation Center model in which the price for one dosage form and type of insulin was capped at a $35 monthly copayment.[16] This model was a major step in increasing access and affordability to those who require insulin, however, only about 33% of Part D plans and 45% of non-low-income subsidy Part D enrollees utilized the model.[16] The Inflation Reduction Act built upon and further expanded the scope of this model by capping the monthly out-of-pocket price for all covered insulin products to $35 for all Medicare Part D and B enrollees.[3] Based on an average insulin prescription cost of $54, this provision will reduce costs by 35% per prescription.[3] A recent study revealed that this $35 price cap would reduce annual out-of-pocket cost per enrollee by $500 and avoid numerous diabetes-associated complication and fatalities which will produce 32,000 life years and 21,000 quality-adjusted life-years.[18] This provision will incur a federal cost of $5.1 billion over 10 years.[16] The Inflation Reduction Act is pivotal in reducing the financial burden placed upon individuals enrolled in Medicare, however, it is critical to indicate that the 21 million diabetics under the age of 65 are still subject to crippling insulin costs. The Biden administration did attempt to extend this provision to the private market, but this act failed in the senate.[17] Other policies that aimed to curtail insulin prices for those with insurance but ultimately failed include the Insulin Price Reduction Act, Ending Pricey Insulin Act, Affordable Insulin Now Act, and Build Better Act.[19] The Affordable Insulin Now Act and Build Better Act would have set a $35 price cap on insulin products for patients with private insurance, with cost reductions serving beneficial for 25% of people on an individual or small group market plan and 20% of individuals using large employer coverage.[19] Due to limited political capital at the national level, however, change must likely sprout from the states and private sector to address insulin prices for those who are not directly impacted by recent drug cost reform.

Policies to reduce the costs of insulin have not only been enacted at the Capital as multiple states have implemented their own regulations to ease pressure on their diabetic constituents. A total of 7 states have enacted their own for insulin copay cap legislations which include Colorado, Illinois, Maine, New Mexico, New York, Utah, Washington, and West Virginia.[20] Colorado was the first state to both pass and enact the price cap which limited the monthly expense for insulin to $100.[21] Floridian legislators introduced a similar bill to the Florida Senate in 2021 which would have capped a 30-day supply of insulin to $100, however, the bill failed in subcommittee.[7] In 2022, Governor Ron DeSantis established Executive Order 22-164 which included provisions to regulate PBMs and authorize price negotiations for pharmaceuticals ineligible for importation which includes insulin.[22] The insurance company Florida Blue has also partnered with Civica RX to provide generic versions of insulin at a cap of $30 for three analogs starting in 2024.[23] Despite this progress, a unified effort is needed from the Florida state government to enact widespread insulin price regulations to benefit those who are not impacted by the Inflation Reduction Act.

Conclusion and Recommendations

The Inflation Reduction Act is a step toward curtailing the rising cost of insulin incurred on the American elderly population, however, action at the state level is needed to protect patients who are not covered by Medicare. Using the evidence analyzed in this brief, Floridian legislators should reconsider instituting an insulin price cap for constituents who cannot reap the benefits of the $35 price cap. This price cap should build upon the other provisions that the state currently has planned to curtail costs. Diabetes has been, and will continue to be prevalent across the US, but regulations regarding the cost of insulin can improve quality of life, reduce mortality, and relieve economic pressure posed by disease burden at both a national and state level.

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Extending Medicaid Postpartum Coverage via American Rescue Plan Act

Domonique Nichols and Devika Dholakia

Key Findings

- Medicaid Expansion under the American Rescue Plan Act (ARPA) improves the health outcomes of women, particularly in the postpartum period. These improvements reduce maternal morbidity and mortality.
- Medicaid Expansion improves mental health outcomes by decreasing the risk for postpartum depression.
- States that expand Medicaid show an increase in healthcare utilization of postpartum women which directly contributes to improved health outcomes.
- Racial disparities persist despite the increase in postpartum coverage in expansion states.

Introduction

Maternal morbidity, mortality, and racial disparities in maternal health continue to be an important target of public policy. Maternal mortality rate in the United States increased in the early 2000s and has since doubled.[1] Postpartum women, particularly those covered by Medicaid are a particularly vulnerable population. More than half of pregnancy-related deaths occur in the postpartum period and a majority of those deaths are preventable.[2] Causes of maternal mortality include cardiomyopathy, other cardiovascular conditions, cerebrovascular accidents, non-cardiovascular conditions, infection and obstetric hemorrhage.[2] To reduce adverse health outcomes, access to preventative and continuous care is critical to improve the health of women during the postpartum period.

Access to health insurance coverage is vital to the health of postpartum mothers. State Medicaid programs have offered insurance coverage to pregnant women with incomes below the federal poverty level since the late 1980s.[3] However, Medicaid eligibility for pregnant women has historically been temporary and terminated 60 days postpartum. Due to the critical nature of the postpartum period and the increase in postpartum death, extended coverage can play a critical role in reducing this outcome. To mitigate these adverse health events in the postpartum period, to reduce maternal mortality, and to address racial disparities in maternal health, the American Rescue Plan Act (ARPA) outlines a series of health policies including expansion of Medicaid eligibility under the Affordable Care Act.[4] These policies allow states the option to extend maternal Medicaid eligibility coverage from 60 days postpartum to 12 months postpartum. Pregnant mothers residing in states that opted out of the continuous coverage extension would continue to lose coverage, placing them at a relatively increased risk for pregnancy-related health issues compared with mothers in states that choose to extend postpartum coverage. Furthermore, a disruption in coverage may decrease healthcare utilization lending to a lack of access to care and a reduction in seeking care.

In this brief, we provide an overview of research measuring the impact of improved maternal healthcare coverage, particularly in the postpartum period by outlining how the Medicaid expansion adopted under the American Rescue Plan Act and Affordable Care Act created an improved healthcare landscape for postpartum mothers. Next, we will address literature that demonstrates how such extensions of coverage have served to reduce racial disparities. Finally, we will provide recommendations regarding further steps that lawmakers can take to improve maternal outcomes in the postpartum period.

The Effect of State Medicaid Expansions

Health insurance for new mothers provides access to necessary postpartum care related to delivery, reproductive health care and chronic disease management.[5] The loss of Medicaid coverage may contribute to high rates of late maternal mortality, as one study conducted by the CDC found that on average, 11.7% of maternal deaths occur more than 42 days after the delivery period.[2] Notably, the proportion of postpartum deaths that occurred between 43 and 365 days postpartum was significantly higher in black women (14.9%) compared with their white counterparts (10.2%).[2] Extending Medicaid coverage has the potential to decrease this gap.

From 2013-2016, the uninsurance rate for new mothers dropped from 19.2% to 11.3% as a result of Medicaid expansion under the 2010 Affordable Care Act.[6] Postpartum coverage extensions under the American Rescue Plan Act would serve to further decrease this number. To date, 29 states have implemented the 12-month postpartum coverage extension under ARPA, 7 states are planning to implement the 12-month extension, and 2 states have proposed limited coverage extension.[7] Medicaid expansion in states such as Arkansas that have adopted the 12-month extension show a 54.9% increase in continuous postpartum insurance coverage and a 75% increase in healthcare utilization.[8] An increase in coverage and subsequent increase in seeking healthcare postpartum is critical for the health of new mothers and infants. Findings suggest disruptions in coverage are a driving force for decreased healthcare utilization in individuals with Medicaid paid childbirth.[8] New mothers with pre-existing health conditions may be at future risk for further complications that may be difficult and expensive to treat; therefore, continuous coverage is needed to mitigate adverse health outcomes and cut long term costs associated with increased morbidity.

Recent studies have found that, in addition to an increase in healthcare utilization, Medicaid expansion has been associated with decreased maternal mortality. States that have adopted Medicaid expansion have been found to have a reduction in maternal mortality of 7 per 100,000 live births compared with nonexpansion states. This difference is even more pronounced among black women for whom Medicaid expansion was found to be associated with 16 fewer deaths per 100,000 live births compared to their counterparts in nonexpansion states.[9] This research makes it clear that extending postpartum coverage for Medicaid recipients may play a compelling role in improving maternal morbidity and mortality and in reducing racial disparities in maternal health outcomes in the United States.

Medicaid Expansions and Postpartum Depression

Just like follow-up outpatient visits and appointments for both the infant and the mother, monitoring postpartum mental health is critical. Postpartum depression (PPD) is a common but serious mental health issue, with symptoms that mimic major depressive disorder (MDD) usually emerging 4 to 6 weeks postpartum.[10] The symptoms of PPD include depressed mood, sleep or appetite disturbances, irritability, thoughts of suicide, anxiety, and more. Studies show that undiagnosed and untreated PPD can lead to major adverse health outcomes such as illicit drug use, alcohol misuse, breastfeeding issues, and persistence of depressive symptoms.[10] Given that over 40% of births in the United States are covered by Medicaid, continuous coverage may be vital to consistent follow up and depression screening in postpartum women.[5]

Studies examining the impact of continuous postpartum coverage on the health outcomes of new mothers show that coverage extension may reduce rates of depression in postpartum mothers. Postpartum depression occurs in 15% of women; coverage by Medicaid showed a 9.2% point reduction in rates of depression in the general population in comparison to adults without insurance.[6] Similar findings could be extrapolated to postpartum population although additional research is necessary to validate this. Compared to 50% of uninsured mothers who needed treatment for major depression disorder (MDD), 66% of Medicaid-insured mothers have received treatment for MDD.[6] Frequent monitoring of PPD symptoms and early treatment is necessary to improve health outcomes for new mothers and Medicaid plays a critical role in combating possible negative health outcomes.

The expansion under the ARPA serves as an avenue to reduce racial disparities in maternal health. Research shows the maternal mortality rate was 3.55 times higher for non-Hispanic Black women compared to non-Hispanic White women.[11] The causes of maternal death vary from eclampsia to postpartum cardiomyopathy (5 times that of non-Hispanic White women). Non-Hispanic Black women have higher rates of low income, Medicaid usage and are at a greater risk of losing postpartum coverage[8], therefore, it's imperative that states adopt continuous coverage under the ARPA. When assessing the effect of the Medicaid expansion on racial disparities in Arkansas, researchers found an increase in continuous 6-month postpartum coverage for both Black and White individuals. However, racial disparities persisted for the number of postpartum visits between Black mothers (2.0) and White mothers (2.5). Expansion is critical to the maternal health of Black women. They are more likely to live in the South where a huge portion of states have not adopted the Medicaid expansion under the ARPA.[12] Although expanding coverage does not eliminate racial disparities, making it evident that more work is to be done, providing Medicaid eligible mothers with continuous postpartum expansion is a critical first step.

Closing the Gap Under the ARPA

Many factors contribute to maternal health outcomes including proper prenatal healthcare, access to adequate care, racial disparities, and postpartum coverage. Medicaid expansion under states who adopted the continuous coverage show an improvement in chronic disease management and healthcare utilization. In addition, mental health screening is increased which reduces the impact and severity of postpartum depression leading to reduced illicit drug and alcohol misuse as well as a decrease in breastfeeding issues. Medicaid expansion states show a 7.01 reduction in maternal deaths per 100,000 live births compared to non-expansion states.[9] Furthermore, Medicaid expansion demonstrated 16.27 and 6.01 fewer maternal deaths per 100,000 live births among non-Hispanic Black mothers and Hispanic mothers, respectively.[9] States must elect to extend postpartum coverage under the American Rescue Plan Act as a critical step in reducing maternal morbidity, mortality, and racial disparities.

Conclusion

Medicaid expansion under the Affordable Care Act in 2010 offered affordable health coverage to vulnerable women of low socioeconomic status. Under the American Rescue Plan Act in 2020, states were given the option to extend postpartum coverage to 12 months as part of a further expansion of the Affordable Care Act, marking a crucial step towards improving the healthcare landscape and reducing the increasing maternal mortality experienced by women throughout the United States. Women living in non-expansion states are at a risk for postpartum coverage loss and adverse health effects due to comorbidities. Furthermore, coverage loss contributes to untreated postpartum depression, illicit drug use and alcohol misuse which all pose a significant health risk for both mother and baby. In addition, racial disparities in maternal health contribute to increasing maternal mortality in non-Hispanic Black women. Although these disparities persist despite postpartum coverage extension, Medicaid expansion is a critical first step.

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Addressing Fetal and Maternal Health in the United States

Patricia Fuentes

Purpose

Stillbirths are a major public health concern in the United States affecting thousands of women annually. Women from historically disadvantaged communities are at a greater risk of stillbirths due to gaps in healthcare delivery and workplace protections. Notably, a significant portion of risk of stillbirths is associated with treatable or preventable conditions.[1] Other socioeconomic factors such as level of education, income, and insurance have also been linked.[2,3] Current research suggest that the US has one of the highest perinatal mortality rates amongst high income countries.[4] This proposal reports and analyzes the risk of stillbirth in disadvantaged communities in the United States. Policy changes in prenatal and maternal healthcare, community initiatives, and implementation of best practice guidelines can improve stillbirth rates.

Key Findings

- In 2016, the United States ranked 25th in the world in third trimester stillbirths.[5]
- Analysis of stillbirths indicate that many cases are due to potentially preventable causes, and in the United States this is about 25%.[2,5]
- Stillbirth rates for historically disadvantaged groups, such low-income and African American women, are double compared to other groups in high-income countries.[5,6]
- Substandard care contributes to 20-30% of all stillbirths.[5]
- One study found that 31.6% of pregnant women needed at least one pregnancy-related accommodation that was not met by their employer.[7]

Background and Motivation

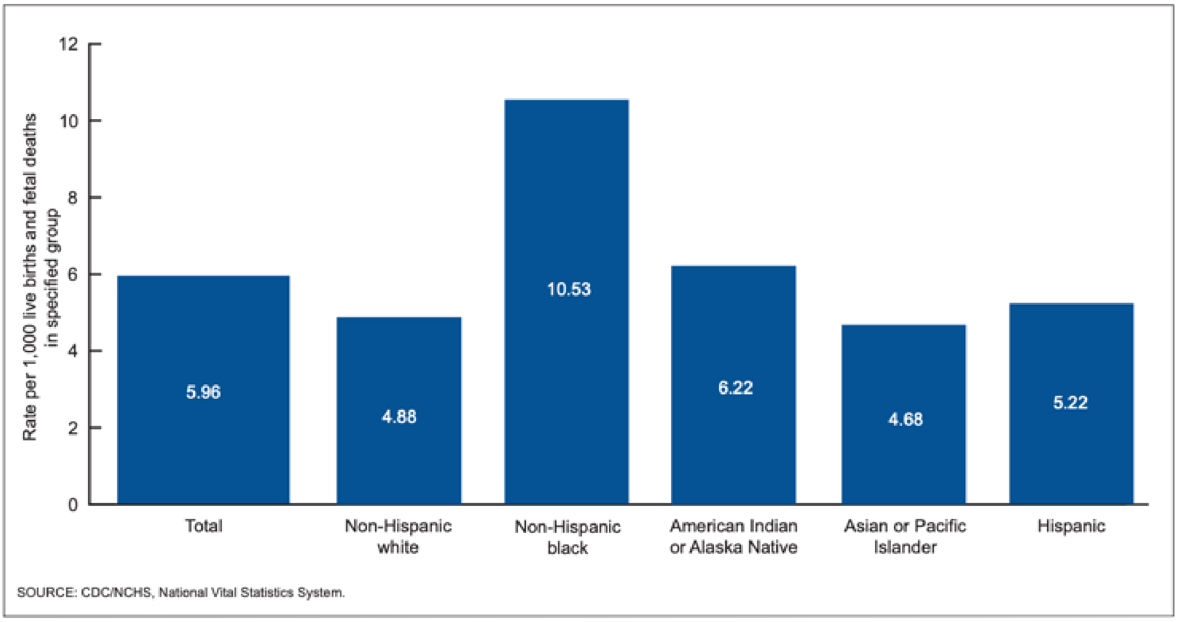
Stillbirth risk has been identified as a public health concern. Although many confounding factors may contribute to the risk of stillbirths, research has indicated a connection between socioeconomic background and race/ethnicity as factors exacerbate stillbirth risk. This policy proposal explores the possible avenues to reduce preventable causes of stillbirths among disadvantage populations, such as low-income mothers. Significant efforts to shed light on this topic has occurred. Every Newborn Action for 2035 was enacted in 2015 with the intention and goal of reducing stillbirth rates globally. Stillbirth rates in the United States are still higher than many other high income and industrialized countries which suggests there is substantial room for improvement. The US ranked forty-eighth out of forty-nine high-income countries for annual rate of reduction of stillbirths. Stillbirths are often stigmatized, silenced, and underreported. This has not only left thousands of bereaving women and parents without answers or supportive care, but it has resulted in a lack of policy support. Consequently, advancements in research and knowledge on stillbirths and its potential causes are limited. Our current knowledge, however, does suggest that a significant portion of stillbirths are due to preventable causes. These are most notably disparities in healthcare delivery. Research indicates that the rate of stillbirths in disadvantaged groups is almost double compared to other groups in high income countries, including the United States. Disparities in healthcare and healthcare delivery have made a substantial contribution to high stillbirth rates among women from low-income communities. The relationship between stillbirths and socioeconomic disparities is complex, which may include barriers to healthcare delivery, socioeconomic factors, and health co-morbidities. These disparities suggest that larger systems of inequality persist and contribute to increasing stillbirth rates in the country. Understanding and addressing disparities in healthcare can move the needle towards a reduction in preventable stillbirths.

Understanding the Risk of Fetal Mortality

The risk of stillbirths in the United States remains a public health concern that has shown little recent improvement. According to the National Survey of Family Growth, it is estimated that there are more than 1 million fetal losses annually in the United States.[8] Fetal mortality is defined as the death of a fetus prior to birth.[8,9] It is important to note the different periods of gestational mortality: early (less than 20 weeks), intermediate (20-27 weeks), and late (28 weeks or more). These delineations play a crucial role in understanding the causes and risks of stillbirths, as well as potential interventions to decrease fetal mortality. Research in this field reveals that *early* fetal mortality may be more related to genetic abnormalities, infections, and placental insufficiency.[10] However, *late* fetal mortality has been markedly linked to the labor and delivery processes.[10] The latter suggests that late fetal mortality may be associated with more preventable causes of stillbirths.

In 2013, the national fetal mortality rate was 5.96 fetal deaths per 1000 live births for over twenty weeks of gestation.[8] The burden of fetal mortality, however, varies substantially by race, ethnicity, and maternal age. Studies reveal that non-Hispanic Black women are substantially more at risk of fetal mortality than non-Hispanic White women in the country.[10] Figure 1 underscores the disparities in fetal mortality across race and ethnicity compared to the national rate. Although a substantial number of stillbirths are associated with congenital deformities and causes, disparities across race and ethnicities reveal that there are broader forces contributing to fetal mortality in the United States.

Gestational age contributes to fetal mortality. The greatest burden of fetal mortality was seen for teenagers and women aged over 35, while rates were lowest for women between the ages of 25 and 34.[8] High risk age groups increased the rate of fetal mortality by more than double, particularly for girls 15-17 and women aged over 45. The high risk seen in teenage pregnancies has been linked to socioeconomic and behavioral factors, such as inconsistent access to prenatal healthcare services.[8,11] For women in the advanced age group, co-morbidities such as severe or uncontrolled hypertension, diabetes, and previous births contributed to higher rates of fetal mortality. Gestational diabetes and pre-gestational diabetes are most prevalent in minority populations, particularly Hispanic and non-Hispanic Black mothers.[6] Pregnant women with diagnosed diabetes are at a greater risk of adverse fetal outcomes including stillbirths, fetal overgrowth, preterm birth, and preeclampsia.[6] Other environmental and behavioral risk factors have been linked to fetal mortality including smoking, maternal obesity, and infections.[12]



SOURCE: CDC/NCHS, National Vital Statistics System.

Figure 1. National fetal mortality rates divided by race and ethnicity, 2006-2013. This study was conducted by the CDC and National Center for Health Statistics.

Workplace Protections During Pregnancy

Federal policies addressing workplace discrimination against pregnant and post-partum women have been integral to ensuring the health of pregnant workers. Many of these federal policies chiefly address employer-based health insurance for pregnant women, workplace protections against discrimination, breastfeeding accommodations and paid maternity leave.[7,13] In 2010, the Affordable Care Act (ACA) required the inclusion of maternity care an "essential benefit" of health insurance, mandate workplace accommodations for breastfeeding, and no longer permit premium rating based on gender. Shortly after, in 2013, the Pregnant Workers Fairness Act proposed to the U.S. Congress to adopt laws requiring employers to provide reasonable accommodations to pregnant employees in all 50 states. Workplace accommodations and protections during pregnancy and post-partum are critical in protecting the health of pregnant workers.

Certain working conditions may pose greater risks to pregnant workers. Physically demanding jobs that require standing, lifting heavy objects, irregular work schedules and long hours may present substantial risks during pregnancy.[13] In the United States, more than one out of five pregnant workers are employed in low-income jobs. Notably, Black and Hispanic women are disproportionately represented in low-income jobs (30% and 31.3%, respectively).[13] Low-income jobs may pose greater barriers to workplace accommodations and flexibility during pregnancy and post-partum, as well as physical and mental stressors. A recent study reported that over half of full-time workers in low-income jobs had little influence over their working schedule. This may pose serious barriers when pregnant workers in low-income jobs need to attend regular perinatal doctor's appointments. Missing appointments at critical stages of a pregnancy may pose serious risks to the health of the mother and child.

A vital element of a healthy pregnancy is regular prenatal checkups. During a pregnancy, it is important to follow the most up to date American College of Obstetricians and Gynecologists guidelines for checkups which include once each month for the first and second trimester; twice a month for weeks 28 through 36; and weekly for weeks 36 to birth. A variety of tests at different stages of the pregnancy are conducted to ensure the health of the fetus and mother. These may include glucose screenings at 26 to 28 weeks to determine the risk of gestational diabetes; tests for bacterial infections in the mother that can cause serious infection in the newborn; and frequent urine samples from the mother can reveal important information about diabetes and pre-eclampsia. High risk pregnancies, however, may require more frequent visits to ensure the healthy development of the fetus. High risk pregnancies include young pregnancies, women over the age of 35, and women with pre-existing comorbidities. Attending timely pre-natal appointments may be a challenge for pregnant women who are unable to easily adjust their schedules or take time off from work. These barriers to healthcare access may result in greater risks during pregnancy.

Protections for Low-income Pregnant Women

Barriers to healthcare services during a pregnancy can present with serious labor and fetal health complications. Although this proposal and research is descriptive, certain areas are worth exploring. The U.S. fetal mortality rate has remained unchanged over the past decade. Current research indicates that women from low-resourced communities and certain race and ethnic groups share a greater burden of the national fetal mortality rate. Possible explanations may include limited employer protections, difficulty accessing perinatal appointments, lack of insurance, and behavioral factors. Although complex, many of these potential factors can be addressed to reduce the burden on pregnant women from low-income communities. To date, many policies have been enacted to protect the rights of pregnant employers; however, there is still room for improvement in low-income occupations. These positions offer less flexibility for pregnant employers posing a barrier to access perinatal healthcare services. This research proposes to expand workplace protections for pregnant employers that offer paid time off for perinatal visits. The number of days may align with national guidelines on perinatal visits.

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Healthcare Outcomes: Fee-For-Service or Single-Payer Model?

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Introduction

Healthcare in the United States has been a topic of debate since the passage of the Social Security Amendments of 1965 (SSA), which established Medicare as the universal health care insurance for the elderly, and Medicaid, which is the insurance program for low-income individuals. Since seeing the positive outcomes of these social programs, politicians and citizens have proposed legislation which seeks to provide health insurance benefits to all citizens within the United States. Much of the legislation passed before the turn of the millennia changed the workings and adjusted how the SSA provided care for the elderly and disabled. In 2009, the passage of the Affordable Care Act (ACA) was thought to change the landscape of healthcare in the United States. The goal of the ACA was to incentivize uninsured individuals to enroll into specific ACA advantage plans, which provided benefits at a lower cost than traditional healthcare insurance plans. If individuals were to opt out of the ACA plan, and stay uninsured, they were to pay a fee for as long as they remained uninsured; this financial penalty was finally repealed in 2017, becoming effective in 2019.[1]

Thirteen years later, and the United States 2020 Census reported that almost 30 million individuals of all ages are uninsured. Furthermore, over 23% of individuals who are insured, still do not have adequate coverage that provides appropriate healthcare access. Even with the implementation of the ACA, individuals remained uninsured and underinsured in large percentages, effectively negating any positive outcomes seen by the ACA. Being uninsured has been reported to be associated with worse healthcare outcomes. Additionally, those who are underinsured are also placed as higher risk for negative outcomes, many times due to financial barriers or delays in healthcare.[2] As of 2021, the Center for Medicare & Medicaid Services (CMS) reports that United States healthcare expenditure accounted for 18.3 percent of the nation's GDP, the highest seen among all developed countries. The beginning of the COVID-19 pandemic in 2019 only lead to increases in healthcare expenditures with further decreases in positive healthcare outcomes.[3]

This paper seeks to find a possible future of positive healthcare outcomes for the generalized public within the United States. In this research brief, we will begin by describing the fee-for-service model, its healthcare outcomes, and the barriers to access faced by individuals within this model. The single-payer healthcare model, its healthcare outcomes, and barriers to access will also be described. Finally, this paper will provide recommendations for policy management and the changes that can be made to lessen healthcare expenditures while improving access to healthcare.

Fee-For-Service

The fee-for-service model is the predominant healthcare system used in the United States today. Although efforts to transition to a value-based model has been made, insurance companies and practitioners still use fee-for-service as their guiding principle. The fee-for-service model is a system in which a payment is provided to a practitioner or healthcare entity, in exchange for healthcare services. This model puts an emphasis on volume and quantity of services rendered, with a varying degree of healthcare outcomes overall. Moreover, each unique service rendered can be billed separately under this model, with reimbursement coming from either the insurance company or government entity that provides coverage for the individual seeking healthcare services. Due to enrollment of individuals in Medicaid and Medicare programs, the United States does not exhibit a true fee-for-service system, instead can be defined as a mixed healthcare system. It is worth noting these government subsidized programs may still not provide universal coverage, thus some individuals covered under Medicaid and Medicare are subject to fee-for-service payments.[4]

Outcomes in Fee-For-Service Models

Healthcare outcomes are a well-established metric to measure quality of healthcare and access of healthcare provided. The United States has been underperforming on almost every healthcare outcome metric under the current fee-for-service model. Importantly, the United States has consistently lagged on infant mortality, with 5.44 deaths per 1000 live births, and life expectancy, at 77.28 years of age as of 2020. Other metrics in which the United States has seem to underperform include patient experience, preventable mortality, and overall outcome. Though the numbers seem to show negative performance of the fee-for-service model, two-thirds of United States citizens have shown to be satisfied with the current fee-for-service model.[4] The discontinuity between the statistics and public perception may be attributed to the healthcare received by privileged individuals. Furthermore, public perception may be swayed by political interest and lobbying insurance companies.

Though the fee-for-service model can be used by all Americans, marginalized groups make up the communities that experience more negative outcomes. For example, as of 2019, black newborns are twice as likely to die compared to white newborns.[5] Moreover, transgender patients have a disproportionally higher prevalence of mental health disease, including clinical depression and anxiety; these same patients also face stigmas and discrimination at higher rates, which contributes to the barriers the transgender community already must overcome.[6] Additionally, the data shows that even if every individual were to receive the best possible healthcare outcome within the United States, it would still fall behind on all outcomes when compared to other developed countries.[7] It is worth noting, many other countries today still use a fee-for-service model as well, such as Canada and Germany. Although the majority of these countries' citizens subscribe to a single-payer healthcare system, the wealthier individuals can opt out of the single-payer system and opt into a fee-for-service, private insurance plan. In Canada, as 2015, the small population that have private insurance, outside of the nationalized system, have been shown to have some improvements in healthcare quality and coordination in the primary care setting.

Barriers to Access and Government Aid

Social determinants are the conditions in which an individual is born into that affect healthcare outcomes and overall quality of life. Barriers to healthcare access are one of the social determinants of health and are associated with poor outcomes. Inequities in healthcare access can also be linked to the other social determinants, such as financial instability, education access, neighborhood and built environment quality, and social connections. These categories do not stand alone, and many times if an individual faces one social determinant they are likely to face another, as seen in many marginalized and underserved communities throughout the United States. So, what does the United States do to combat the outcomes associated with the social determinants? Government assistance programs are the predominant method that are currently used to try and aid the underserved communities. Medicaid, as mentioned above, is the social insurance program used for those who are low-income; pregnant mother and children are also able to receive Medicaid benefits. Medicaid benefits last until an individual is 18 years old or until a mother is 12-months post-partum. For individuals who are living below the poverty level, Medicaid benefits change depending on how much below the poverty level an individual is, and how many members of the family live under their household. Other examples of government aid that are healthcare related include Supplemental Nutrition Assistance Program (SNAP), and Special Supplemental Nutrition Program for Women, Infants, and Children (WIC).[3]

Single-Payer Healthcare

The single-payer healthcare system is a healthcare system in which one public agency is financially responsible for the healthcare of its population. Instead of having multiple private insurance companies, where individuals are free to subscribe to the company of their liking, all individuals enrolled in the public agency and receive the same benefits. Under a single-payer system, many other services such as prescription drugs, dental and vision care, and long-term care, are also provided for. As of 2022, 17 countries have adopted this model; these countries also give the option for an individual to opt-out of their public insurance and opt into a private insurance plan for a monthly premium. With that, in countries such as Canada, England, and Germany upwards of 90 percent of individuals subscribe to the public insurance, while less than 10% usually opt into a private plan; typically, those who are wealthy are the individuals who choose to opt-out, despite only a small improvement of healthcare outcomes seen in the private sector, compared to the public.[8] In the United States, government programs such as Medicare and the Veteran's Health Administration (VA), are example of single-payer healthcare systems, as previously alluded to.

Outcomes in Single-Payer Healthcare

When one looks at the same metrics previously used to measure effectiveness of fee-for-service, countries who impart a single-payer system for the public outcompete fee-for-service in almost every measure. According to the United Nations International Children's Emergency Fund (UNICEF), as of 2020 the country with the least amount of infant mortality is Iceland, at 1.54 deaths per 1000 live births; Sweden, with 2.15 deaths per 1000 live births is at number 10. The United States, with 5.44 deaths per 1000 live births is ranked number 50 across all countries. For life expectancy, all single-payer healthcare systems, apart from Kuwait, ranked higher than the United States. It is important to note that the top ten countries with the highest life expectancy are composed of countries that subscribe to a single-payer healthcare system and a mixed-payer healthcare system, with Hong Kong having the highest average life expectancy.[9]

When looking at one of the highest performing healthcare systems, Taiwan, marginalized communities do not face similar barriers in healthcare as their counterparts in the United States. Amongst the Taiwanese people, approval ratings are extremely high, with the hierarchy of healthcare being well understood by the population, such as going to the appropriate facility for any given issue; for example, going to a neighborhood clinic for a minor cut or burn, while reserving major hospital beds for severe trauma or emergency events. High approval ratings may be attributed to automatic citizen enrollment into the National Health Insurance System (NHI), regardless of race or gender identity.[10] Regarding expenses, most countries that currently use a single-payer system also spend less on healthcare annually. Of the top 10 performing countries with a single-payer system, their healthcare spending falls between 8 and 13% of their GDP, while the United States spends 18.3% of their annual GDP on healthcare expenditures.[11]

Problems in Single-Payer Healthcare

Every healthcare system has its benefits and drawbacks, including single-payer healthcare. One of the main issues faced in almost half of the countries that subscribe to a universal healthcare system is long wait times. Imaging modalities were shown be to a bottleneck in the continuity of care, with wait times ranging from one week to two months. Furthermore, wait times in complicated surgeries were also an issue, with some patients waiting up to six months for a hip-replacement. Another issue many of these countries face is overall healthcare access. Specifically, many individuals lack access due to geographic barriers. Regional economies also seem to play a role in the quality of services provided. Differences in technology, infrastructure, and wealth are seen depending on where the healthcare in a country is being provided.[12]

Lack of physician autonomy is one of the main complaints reported on the side of the healthcare provider. Regulations in imaging usage, for example, may be perceived as lessening the autonomy of the provider, while also creating a divide in the patient-doctor relationship. If a patient were to come in and request an X-Ray, for example, the physician may be put in a predicament where they must choose between what would be best for the patient and what government-issued regulations must be followed. Arguments may be made in favor of these government regulations, which may aid in combatting the issue of medical waste; not only are unnecessary procedures avoided, but resource allocation to appropriate patients may lead to smoother continuities in healthcare management.[12]

Recommendations

Solving the healthcare crisis in the United States is an ongoing, and sometimes uphill, battle. Recommendations for rolling out legislation that combats healthcare inequities will include a two-step process. The first step is improving on the current healthcare system before transitioning to a different system all together. Expanding government programs such as Medicare and Medicaid, would lessen the burden on the healthcare system during the transition process. Expansions in Medicare may include enrollment into the program at 55 years of age, instead of the current age of 65. Moreover, expansion in coverage is essential, that is, covering the costs of all pharmaceuticals and essential medical technology of the patient. As of 2022, marginal changes in Medicare have been made in increasing pharmaceutical coverage to all enrollees and lessening the Medicare Part B deductible from $233 to $226 a year.[3]

Regarding improvements in Medicaid, one priority is to ensure healthcare access to enrollees; this includes not only providing the benefits of Medicaid, but also making it easier for them to use their Medicaid benefits, for example, expanding Medicaid reimbursement to include a larger pool of providers will allow for better access for individuals who at this time are unable to seek healthcare due to transportation or disability. Providing incentives for physician participation may aid in the enrollment process, and ultimately give patients easier access to a provider of their choosing. Patient education must also be improved, especially to subscribers. Many times, individuals delay their healthcare to due lack of education on their benefits, language barriers, or facing healthcare stigmas; expansion must include education, which would emphasize the importance of preventative care, rather than acute care management.

Once changes like the ones recommended are implemented, then the healthcare system can slowly transition to a single-payer body. It is essential to lessen the burden of transitioning to a single-payer model as much as possible, since so many individuals who were once uninsured or uninsured, would now have access to benefits they may have not had before. One potential way to combat this potential burden is to enroll individuals on a categorical basis. By slowly enrolling individuals who need healthcare access the most, over a period, extremely high patient volumes may be avoided. Of course, an ethical dilemma presents itself here since you may be delaying the care of some patients and prioritizing the health of one over another. Whether or not someone may qualify for ongoing universal coverage enrollment may be done via online assessments, or by undergoing an annual exam by a patient’s primary care provider. Ultimately, the idea is to transition in a slow enough manner that considers both healthcare provider burden and patient health. The people must voice their support for such legislation, such that their local, state, and federal governing bodies must combat the inevitable lobbying made by the insurance and pharmaceutical industries. Moreover, reallocation of the federal budget must be made, such that the spending is appropriate to support a healthcare system overhaul; both topics should be discussed and researched further before any recommendations are to be made.

Moving Forward

Research on the current healthcare systems is everchanging. Every year the trends tell a new story and may be used in specific ways to dictate both governing and public perceptions. Future research regarding the topic may include economic feasibility studies on whether a nationalized healthcare system is possible within the United States. Despite lobbying against it, pressure from the public and wading support of governing bodies may lead to legislative action. In 2022, Senator Bernie Sanders reintroduced the Medicare for All Act, along with 14 other senators. With this proposition, the Medicare for All Act would be introduced over a four-year period and would cover dental care, vision care, and other coverage with no out-of-pocket expenses. Studies have shown that a universal healthcare system, such as the one proposed by Sen. Bernie Sanders and colleagues, could save the United States a minimum of half a trillion dollars in healthcare spending. Though the fate of the Act currently remains uncertain, people remain weary to the fact that the state of healthcare needs to change in the United States, and propositions like these are the first steps in a different direction.

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Expanding Coverage and Accessibility of Sexual Assault Forensic Examinations in the United States

Sophia Perez

Purpose

From its enactment in 1994, the Violence Against Women Act (VAWA) has expanded protections for women and led the path towards ending violence against not only women but all potential victims of sexual assault. In 2005 the reauthorization of VAWA went even further to provide full compensation for sexual assault forensic exams regardless of whether victims reported their sexual assault to the police.[1,2] Through federal grants to qualifying states, the VAWA has given victims of sexual assault guaranteed assistance. However, the VAWA has minimal requirements of what is included in a sexual assault exam and wide discrepancies between states has led to gaps in coverage for patients nationwide. This research brief reports and analyzes gaps in payment coverage for sexual assault forensic exams, variations in what is included in exams according to differing states, and the shortage of sexual assault forensic examiners in the United States.

Key Findings

- The Violence Against Women Act established grant programs to cover expenses for sexual assault forensic exams and training for examiners, yet minimal requirements of what is included in a sexual assault exam and wide discrepancies between states has led to gaps in coverage for patients nationwide.
- Current out-of-pocket costs for care sexual assault victims received in hospitals, related to their sexual assault, average from $948 to $3,551 for both insured and uninsured patients.
- There is a nationwide shortage of certified sexual assault forensic examiners with only 2,135 certified sexual assault nurse examiners (SANE) registered with the International Association of Forensic Nurses (IAFN) and no government sanctioned website providing their locations.
- Many states have integrated online training programs, telehealth, and clinical training labs to increase the number and availability of certified sexual assault forensic examiners.

In the United States (U.S), 1 in 4 women and 1 in 9 men have experienced sexual assault in their lifetime, with an estimated 20.48 million Americans falling victim of attempted or completed rape between 1998 and 2016.[3,4] Throughout the U.S, female rape victimization ranged between 12.2% and 26.3% in a lifetime, with an estimated 1,473,000 women experiencing rape annually in the U.S.[5] According to the CDC's survey report on sexual violence, the impact of sexual assault is not without consequences to the victims; 1 in 3 women and 1 in 18 men were injured during their assault.[3] These injuries can include, and are not limited to, lacerations, bruises, fractures, head and facial trauma, and vaginal trauma which may require surgical treatment.[4,6] Additionally, 1 in 7 women and 1 in 25 men contracted a sexually transmitted infection (STI), and 1 in 7 women became pregnant after their sexual assault.[3]

Since its establishment in 1994 the Violence Against Women Act has assisted in getting these individuals the help they need. In 2005 the VAWA reauthorization included a grant program which provided funds to pay for forensic medical exams performed by trained examiners for victims of sexual assault.[1,2] According to the National Protocol for Sexual Assault Forensic Examinations (2013), the Services, Training, Officers, Prosecutors (STOP) Violence Against Women Formula Grant Program was established by VAWA to provide states with compensation for the exams if they were performed by a trained examiner for victims of sexual assault.[7] Additionally, The STOP grant program stated that to also qualify states may not require victims to seek reimbursement from their insurance carriers for payment of the exams.[7] However, the bill does not provide guidance to states regarding the specific entity or organization that is required to cover the fees and cost of the exam. A lack of consistency in the entity responsible for payment of the exams throughout the nation has contributed to the out-of-pocket cost victims are charged with after their exams.

According to the VAWA reauthorization:[2]

> The term 'forensic medical exam' means, with respect to an individual:
>
> "(1) an examination for physical trauma;
> "(2) a determination of penetration or force;
> "(3) an interview of such individual; and
> "(4) the collection and evaluation of evidence from such individual"

The minimalist nature of this definition has led to discrepancies in what is included in a sexual assault forensic exam and what is fully covered for the patient. Of the fifty United States, only twenty states require emergency departments to provide information about emergency contraception and only sixteen states require emergency departments to provide patients with emergency contraception if requested.[8] Additionally, the current VAWA does not include protections against a patient's insurance billing them for emergency care services related to their sexual assault that they received at an out-of-network facility or by an out-of-network provider at in-network facility. The limited nationwide availability of certified sexual assault forensic examiners, especially in rural communities, and the lack of protection from surprise bills from insurance companies has led to many patients paying out-of-pocket for their sexual assault exams and emergency care.[9]

Current Out-of-Pocket Costs

A 2022 study using data from the 2019 Nationwide Emergency Department Sample studied the charges billed to patients with and without insurance.[9] Out of 35,807,950 hospital emergency department visits, 112,844 were billed using an ICD 10 sexual violence diagnosis code and an estimated 17,824 (16%) patients were expected to pay out-of-pocket for the care they received related to the sexual assault.[9] Amongst these patients 88.3% were female, 36.2% had Medicaid, and 22.1% were privately insured.[9] On average the patients' emergency department charges averaged $3551; However, charges for uninsured patients averaged $3673 and charges for victims of sexual abuse while pregnant averaged $4553.[9]

The out-of-pocket expenses are not solely limited to women who are uninsured or receive Medicaid. A 2017 study focused on analyzing insurance providers' payment charges for 1,355 privately insured female sexual assault victims who had been hospitalized in 2013 and billed using the *International Classification of Diseases 9th revision* (ICD9) code E960.1 for rape.[10] This study found that although the insurance providers covered approximately $5,879 (86%) of the total costs, the women still had to pay an average of $948 (14%) in out-of-pocket cost for their care.[10] Although the VAWA has been enacted during this time, these costs show that hospital billing procedures amongst patients do not differ between insured and non-insured patients being seen and treated for sexual assault and further expense coverage from the VAWA is needed to fill this monetary gap.

A state-wide study of sexual violence costs in Iowa in 2009 further showed the disproportionately high costs victims of sexual assault are left with after their hospital visit.[11] In 2009 an estimated 49,410 adults and 5,930 children experienced sexual assault in Iowa leading to as estimated $34.3 million in direct medical care costs; Each adult incidence of rape cost approximately $110,937 and each child sexual violence incidence cost approximately $159,610 not including future costs related directly to pregnancy ($2,420,000) and sexual transmitted infections ($5,168,000) resulting from the assault.[11] Overall, the direct and indirect costs of sexual violence are high for individuals and continue to greatly impact this distinct patient population despite the reauthorization of the Violence Against Women Act.[11]

Expanding Sexual Assault Forensic Exam Services

Current legislation included in the 2022 reauthorization of the Violence Against Women Act (VAWA) includes minimal requirements of what is included in a sexual assault forensic exam (SAFE). Although the VAWA covers the cost of a SAFE, it does not specifically include coverage of other exams and services provided to victims such as drug testing, STI testing and treatment, pregnancy testing, HIV prophylactic treatment, and treatment of acute injuries (i.e., stiches).[12] Thirty states do not have state requirements for payment coverage of lab testing, drug testing, STI testing, pregnancy testing, emergency contraception, HIV prophylaxis provided with a SAFE.[12] Many states, such as California, Illinois, Maine, Michigan, New Jersey, New York, Oregon, Virginia, and Wisconsin, have expanded the services included in their SAFEs and have required emergency care facilities to offer emergency contraception and HIV prophylaxis to the rape victims they treat.[12] Of the fifty United States, only twenty states require emergency departments to provide information about emergency contraception, and only sixteen states require emergency departments to provide patients with emergency contraception if requested.[8] With approximately 1 in 7 sexual assault survivors becoming pregnant after their assault, the American College of Obstetricians and Gynecologists (ACOG) recommends that emergency contraception be available in hospitals and centers that perform SAFEs and be provided to the victims.[3,13] Unlike medical abortions which terminate an active pregnancy, emergency contraception works by preventing or delaying ovulation when taken within 72 hours after unprotected sex and does not cause abortion or harm an active pregnancy.[14] Although emergency contraceptive has been made available over the counter at various retailers, taking the medication is time sensitive, and nine states have enacted laws that allow pharmacies and/or pharmacists to refuse to dispense contraceptives, including emergency contraception.[15] Of these nine states, four (Arkansas, Idaho, Mississippi, and South Dakota) have also recently banned abortion with very little exceptions.[16] This indicates an ongoing need to provide education on emergency contraception, its prompt usage after unprotected sex, and its accessibility to victims of sexual assault in emergency rooms who are at an increased risk of pregnancy.[14] To ensure the safety and protection of patients in America, it is important that we ensure these individuals obtain the services they need in a timely manner.

Increasing Availability of Sexual Assault Forensic Examiners

The availability of trained sexual assault forensic examiners is a nationwide problem as there is a shortage of trained professionals, especially in rural communities. Historically the providers performing SAFEs have been nurses trained in a 40-hour certification program to become Sexual Assault Nurse Examiners (SANEs). Currently there are only 2,135 certified SANEs registered with the International Association of Forensic Nurses (IAFN).[17] Various states including Wisconsin, Nebraska, Florida, and Colorado, do not have enough examiners to meet the need in their states.[18] Limitations in the number of qualified instructors for SAFE certification programs and limited opportunities to complete the clinical training requirements have created barriers towards expanding the number of sexual assault forensic examiners in the United States. SAFE training programs in Colorado have adopted online training programs, and those in Wisconsin have integrated clinical training labs into their programs allowing examiners to fulfill clinical training requirements by performing parts of the exam on teaching assistants trained and hired for the program.[18] Through the addition of these methods to their SAFE training programs, these two states have been able to increase the number of certified sexual assault forensic examiners in their state in a cost-effective manner.[18] The integrations of these methods to SAFE training programs around the nation may aid in reducing the nationwide shortage of certified professionals and increase the quality care for sexual assault victims.

Expanding the scope of treatment to include sexual assault forensic examinations via telehealth can also assist in increasing the availability of SAFEs to sexual assault victims throughout the nation. A 2019 study evaluated the impact of using telehealth to allow SANEs to assist clinicians in performing sexual assault forensic examinations for 129 patients.[19] During the examinations, SANEs aided the clinicians remotely and guided the clinicians through history-taking, proper documentation, forensic examination steps, evidence collection, and proper identification and documentation of the patient's injuries.[19] Through the use of telehealth to include SANEs in the treatment of sexual assault victims, clinicians around the nation can provide proper treatment for these patients regardless of where they are located or whether the hospital/clinic has a SANE available. The site clinicians in the study also reported positive remarks regarding the program and felt positive in their ability to provide the patient with the best care.[19]

Currently there is also no government website that lists the location of certified providers of the financially covered medical forensic exams. The creation of a government sanctioned website containing the location of hospitals/clinical sites that provide sexual assault forensic exams by certified SANEs would allow victims of sexual assault to locate centers that will provide them with the best and most knowledgeable treatment during their time of need.

Conclusion

Expansion of the services covered in a sexual assault forensic exam and increased accessibility to certified sexual assault forensic examiners offers greater and more consistent healthcare coverage to the millions of sexual assault victims every year during their time of need. Although the Violence Against Women Act has paved the way in reducing sexual assault rates and increasing assistance for victims, its many gaps continue to leave these individuals vulnerable and subject to various out-of-pocket fees. Without expanded coverage and accessibility, this can mean sexual assault victims are left with a large burden to bear regarding their medical bills that directly resulted from them seeking help after their assault. Expanding the language of the Violence Against Women Act to include required coverage of sexual assault exams without cost-sharing, specifics on the state entities covering the costs of the exams, expanded teaching methods for examiner certification methods, and/or inclusion of certified examiners via telehealth as methods of providing covered exams may aid in overcoming current barriers. Also, the development of a government website and/or call center that can provide individuals with information regarding the location and contact information for certified sexual assault forensic examiners may aid in ensuring victims of sexual assault can access the care they need and receive the care provided to them by the VAWA.

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Medicaid Expansion and the Refusal to Expand: Impact and Ramifications

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Purpose

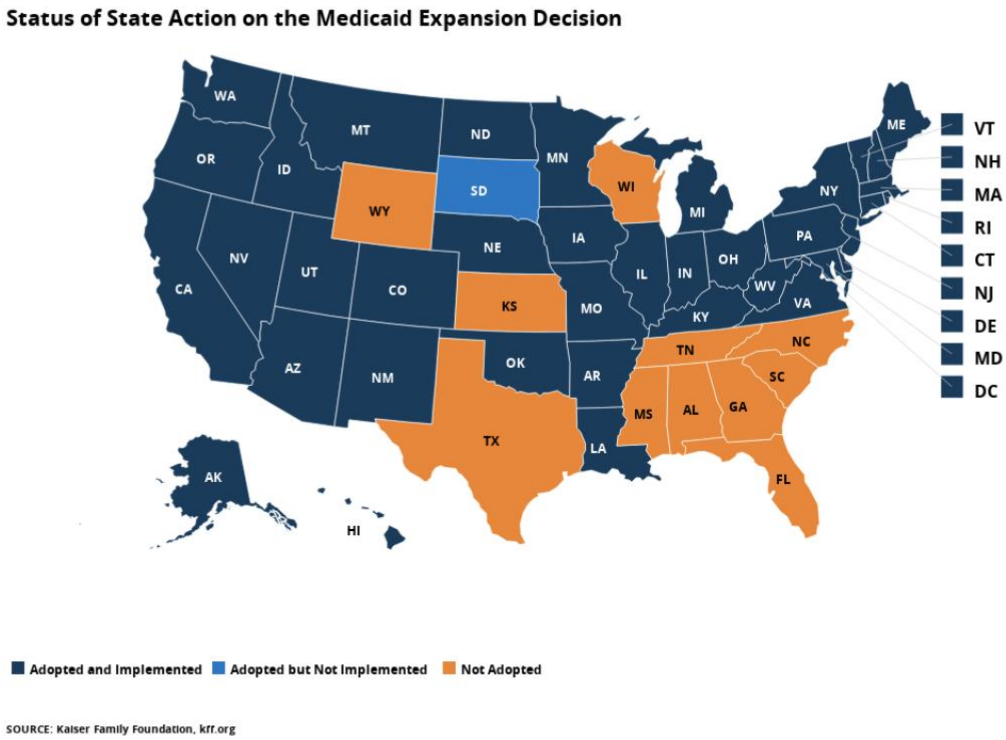
Medicaid, similar to Medicare, has changed in various ways as a result of the legislations that followed that modified different aspects of the program, such as its formal tie to welfare and the states' ability to implement expansions through section 1115 waivers ("demonstration projects"). One such alteration of the program came from the Patient Protection and Affordable Care Act (ACA), which in part required states to offer Medicaid expansions in order to satisfy the goal of increasing the population of insureds. Despite the U.S. Supreme Court ruling in 2012 upholding the constitutionality of the law, it did allow states to choose to expand Medicaid, rather than being mandated.[1] However, the motivations behind lack of expansion, especially in Southern states with a large number of constituents who would have benefitted—including Florida—remains an important discussion as it relates to healthcare access and disparities seen throughout the country. This brief reports the motivations behind the choice to not expand the Medicaid programs and analyzes how this impacts the care of patients, widens health inequities, and harms vulnerable populations by demonstrating the evidence of the benefits experienced by expansion states with over 10 years of evidence since the decision was made. A focus on Southern states, especially Florida, is presented in the brief. There is also a brief discussion of the federal-state relationship in regard to insurance. The findings suggest there are significant ramifications as a result related to this refusal to expand Medicaid across the nation, specifically to states with large uninsured populations, emphasizing the healthcare and financial systems of a state.

Key Findings

- The main motivations to not expand the state Medicaid programs in non-expansion states were financial in origin, specifically citing federal funding beyond the original allotted time, "waste, fraud and abuse" of the Medicaid system and the "Woodwork Effect".
- The coverage gap widened, preventing more than 6.4 million Americans—who would have qualified in the recommended expansion of the Federal Poverty Line criteria to 133% rather than 100%—more so for those of racial and ethnic minorities due to increased rates of not being below the current criteria, resulting in an estimated $1 billion in uncompensated care.
- Health inequities grew for vulnerable populations, such as HIV/AIDS patients and women in need of cancer screenings, in non-expansion states, with about 60,000 individuals not receiving coverage, deepening existing disparities in race and socioeconomic status.
- After 10 years of expansion, states that proceeded forward demonstrated increased access to care, utilization of services, affordability of care and financial security among low-income populations, as well as state budget savings, revenue gains and overall economic growth with reduction in uncompensated care costs.

Background and Motivation

Since the inception of the Medicaid program in 1965, it has provided coverage for a variety of different groups of people including pregnant women, those under the federal poverty line, and individuals with disabilities, among others. The passage of the ACA in 2012 aimed at increasing access to medical care, and in doing so, the statute posed two major questions to the states when it came to healthcare coverage of its citizens: "(1) whether to create a state-based exchange for the purchase of subsidized private health insurance, and (2) whether to expand Medicaid, the joint state/federal government health insurance program for the poor".[2,3] With the constitutionality of the mandate of expansion challenged, rendering it a state by state decision, the debate became "to expand or not expand, that is the question". After this ruling, a number of states chose not to expand Medicaid as encouraged by the ACA (about 21 of them).[4] As of 2022, 11 states have still not expanded Medicaid (Figure 1).[5]


Status of State Action on the Medicaid Expansion Decision

SOURCE: Kaiser Family Foundation, kff.org

Figure 1: Status of State Action on the Medicaid Expansion Decision
The current state of the United States on the decision to expand Medicaid state by state in 2022[5]

Moreover, the United States insurance market is one of immense complexity, involving various players—insurers, regulatory bodies, and consumers—as well as multiple concerns and unique issues, such as those that arise due to natural disasters and the legal environment encompassing the insurance industry. States are the primary regulators and enforcers of insurance legislation as supported by the McCarran-Ferguson Act in 1945; however, this does not mean that the federal government has not been/is not involved. After several insurers went insolvent in the 1980s and 1990s, the House Subcommittee on Oversight and Investigations in 1990 released a report entitled Failed Promises: Insurance Company Insolvencies, alongside a subsequent report in 1994 entitled Wishful Thinking: A World View of Insurance Solvency Regulation, both of which comment on the inadequacy of the state-based insurance regulatory framework. Although the federal government has not preempted the field of insurance, they are still presently involved in a variety of fashions, including the ACA. This demonstrates continued importance to the idea of healthcare coverage and access as it exposes areas of interaction between the two governments, and mechanisms of influence that shift the landscape of medicine, state by state.

Methods

The sources used for this brief come from peer-reviewed journals, including the *New England Journal of Medicine* and the *American Journal of Public Health*, legal statutes, U.S. Supreme Court proceedings, and health policy data experts, like the Kaiser Family Foundation (KFF). Articles between 2012 (the year of *National Federation of Independent Business v. Sebelius*) and 2022 were included in an effort to capture the timeframe of when the decisions to expand (or lack thereof) were occurring, as well as the analysis surrounding how this choice has impacted healthcare coverage—and outcomes—of the uninsured and vulnerable populations since. Data analysis was extracted from the health policy information completed by the KFF, especially their literature review published in 2021, and/or from the research generated from the authors.

Results

In general, states were predominantly financially motivated to not to expand their Medicaid programs. Although the federal government had been providing the states with a "higher percentage" of funds for Medicaid, the "enhanced match" expired in 2011; as of 2014, the Medicaid eligibility was broadened to include individuals up to 133% of the federal poverty level and states were not allowed to constrict their eligibility criteria due to a "Maintenance of Effort" rule within the legislation.[6] Thus, states were being encouraged to expand their Medicaid programs, but federal funding is being reduced and the states' ability to save money—by removing people—is not allowed.[6] Similarly, states in opposition claim that they cannot afford their "small share" (10%) of the costs and that the actual costs "far exceed" the 10% claimed.[3] These states also assert that there is no "trusting the federal government to keep its commitment to states" due to Congress' ability to theoretically change the "ACA's terms in the future"—essentially stating it is a "bait and switch".[3] Other arguments against expansion are that Medicaid results in billions of dollars in "waste, fraud and abuse" and that overall quality of care is "so bad" that the expansion would likely "hurt overall population health".[3,7] Also, when we look at the amount of cost to the states, the calculations that they conducted include the costs associated with the "Woodwork Effect"—which means that people who are not currently eligible will sign up for the program because of the outreach efforts.[8] When we consider three states in particular—Texas, Georgia, and Florida—their decision to not expand placed half of the uninsured population at risk.[4] These states prevented about 6.4 million Americans from receiving insurance, as well as potentially increasing their own spending on uncompensated care to about $1 billion . Along this vein, we must study the impact of this coverage gap on racial and ethnic minorities; studies have demonstrated that "these individuals would have been eligible under the Medicaid expansion, however, in the absence of the expansion, they remain ineligible for Medicaid and do not earn enough to qualify for premium tax credits to purchase Marketplace coverage, which begin at 100% FPL".[9]

Since the state-guided decision of expansion, a multitude of studies have been published looking at the impacts that expansion and non-expansion states have had with regard to this choice. In 2021, the KFF completed a literature review of 197 studies, outlining this impact[10]. The report demonstrated that expansion had an overall positive impact across seven general categories (Table 1).

Categories	# of Studies
Cancer, Chronic Disease & Disabilities	73
Economic Impacts on States & Providers	42
Disparities	41
Sexual & Reproductive Health	34
Behavioral Health	24
Mortality	19
Social Determinants of Health	19

Table 1: General Areas Effect of Expansion
The seven identified areas of positive impact seen in states that chose to expand Medicaid[10]

Prior to the passage of the ACA and the National Federation of Independent Business v. Sebelius decision, coverage and health care access presented important conversations surrounding patient outcomes, especially those of vulnerable populations. After the decision and over ten years of evidence, there have been vast benefits demonstrated in states that chose expansion versus those who did not. Overall, cancer patients and survivors saw an increase in coverage, in early-stage diagnosis with improvements in the usage of treatments, and increased screenings—like mammograms—and possible prevention strategies—like HPV vaccines. In terms of other chronic conditions, such as diabetes and cardiovascular diseases, and individuals with disabilities, there was improved coverage, access to care and health outcomes. For economic effects on states, there were a wide range of benefits, including increased federal Medicaid spending, net state savings, increased revenue—both, the state, and hospitals—and progress concerning the payer attributes of the "payer mix" with the newfound coverage. Studies even found that non-expansion states lost up to $43 billion dollars in federal funding. When we consider disparities across race/ethnicity, and socioeconomic status, among others, there was a broad decrease in gaps of utilization of services, affordability of care, coverage, and outcomes, with a small number of studies displaying an increase in disparities for Black and Hispanic patients. Maternal health, postpartum care, access to contraception and HIV/AIDS screening and outcomes saw improvements as well, such as decreases in mortality, increases in access and use of services, and expanded screening for sexual health matters. Similarly, there were improvements in behavioral health regarding access and outcomes, specifically of patients with substance use disorder, and mental health conditions, like depression. Though only 19 studies examined the impact that expansion had on mortality, it revealed an “all-cause” mortality decline of 3.6%, with specific declines seen in certain health conditions like cancer, cardiovascular disease and liver disease, and maternal mortality. However, there was no effect seen for other individuals with conditions/services like glioblastoma, hemodialysis, and overall infant mortality. Lastly, the studies indicated largely positive associations of expansion and social determinants of health, such as access to care in rural areas, decreased personal health expenditures, lower high school dropout rates and increased utilization of services by houseless populations. In summary, when we consider the change expansion had on the seven categories identified—and the subcategories within each—the decision of the nearly 40 states saw prompt and widespread advantages, for the states, local health systems, and most importantly, patients (Table 2).

Categories	Areas of Effect	General Impact
Cancer, Chronic Disease & Disabilities	Cancer Coverage	Increased
	Cancer Diagnosis & Treatment	Increased (early-stage and utilization)
	Cancer Screenings and Prevention	Increased
	Chronic Conditions Coverage	Increased
	Coverage for Individuals with Disabilities	Increased
Economic Impacts on States & Providers	State Budgets & Economies	Increased federal funding No “crowd out” of other services
	Payer Mix	Improved
	Financial Performance of Hospitals and Other Providers	Increased revenue
Disparities*	Race/Ethnicity	Decreased (overall)
	Socioeconomic Status	Decreased
	Others (Age, Sex, etc.)	Decreased (overall)
Sexual & Reproductive Health	Maternal Coverage and Use	Increased
	Infant Health Outcomes	No impact
	Postpartum Care Coverage	Increased
	Access to Contraception (LARCs)	Increased
	HIV/AIDS Screening & Outcomes	Increased (screening and utilization of treatment)
Behavioral Health	Access to Care & Outcomes for Substance Use Disorder	Increased
	Mental Health Care Access & Outcomes	Increased
Mortality	Overall	Decreased (3.6%)
	Specific Health Conditions	Decreased
Social Determinants of Health	Access to Care in Rural Areas	Increased
	Impacts on Personal Economy, Employment and Education	Improved
	Houselessness Utilization of Services	Increased

Table 2: Impacts of Medicaid Expansion
Outline of the general impacts of expansion among the seven categories and the subcategories within[10]
*Disparities of coverage, access, and outcomes. LARC: Long-acting reversible contraception

Discussion

The debate considering whether or not to expand has been discussed since the passage of the statue, especially the reasons for why states, like Florida and Texas—with large populations that would have seen increased coverage—chose not to. Numerous studies conducted about these motivations revealed that these were financial in origin, citing lack of federal funding, “waste, abuse, and fraud”, and the negative connotations of the “Woodwork Effect”. However, these concerns and logic behind these decisions have been shown to be without merit. For instance, the claim of a lack of trust with the federal government’s intentions “lacks sincerity” because there is “no objective basis” for the federal government to change their financial commitment to the states and they have never done so with Medicaid before; furthermore, states have the ability to reverse their expansion decisions when they like, so they have the power to avoid any financial turmoil in any event.[8] In terms of the “Woodwork Effect”, this will happen regardless of the expansion meaning it should not be included in the estimation of the cost of the expansion.[6] Moreover, when considering the allegations that Medicaid is “so bad” for the population, this has been shown to be a misrepresentation of study findings. For example, the studies that were conducted that made comparisons between Medicaid and other health plans indicated that there was “no significant improvement,” but was interpreted to mean “no improvement”; also, the highlights of the study failed to include positive findings, such as the fact that Medicaid demonstrated success in meeting public health goals, including increased primary care use, increased use of preventative services and increased mammograms, among others.[7] All in all, the claim that states and their citizens would be better off without Medicaid (or expansion there within) threatens to leave millions of Americans uninsured, which would place a more severe burden on the state health and financial systems compared to expansion.

Since the passage of the ACA over 10 years ago, researchers had the opportunity to evaluate the effects of Medicaid expansion and essentially test the concerns of non-expanding states. The literature reviews published by the KFF in 2020 and 2021 demonstrate the overall positive impacts that expansion had in states that chose to do so. The “significant coverage gains and reductions in uninsured rates among the low-income population broadly and within specific vulnerable populations”, is an important result because the vulnerable populations—those with cancer, HIV/AIDS and other chronic conditions—were those struggling with coverage the most.[10,11] Thus, these findings illustrate the ability of the expansion to care for populations in-need. Moreover, the research displayed how the expansion greatly increased “access to care, utilization of services, the affordability of care, and financial security among the low-income population”; while the results were mixed when it came to provider capacity, the results overall show a large benefit from enlarging the Medicaid program within those states.[10,11] Lastly, when we consider the economic measures evaluated, Medicaid expansion provided for “state budget savings, revenue gains, and overall economic growth”, as well as a reduction in uncompensated care costs from hospitals and a potential gain in employment (and therefore, the labor market in those states).[10,11] While the federal government’s role in funding these expansions decreased in 2020, it is clear the substantial financial improvements this has had. In general, the data demonstrates the strides that expansion has made in the seven categories of impact—cancer, chronic diseases, and disabilities; economic impacts; disparities; sexual and reproductive health; behavioral health; mortality; and social determinants of health—providing evidence-based measures of what expansion could mean for the state, local health systems and patients, especially those chronically underserved and underrepresented by the healthcare system of this country.

With regard to policy initiatives, citing all the evidence over the past ten years, the simple answer is to expand Medicaid in all states. However, with the decreased federal funding, and continued state resistance, this may not occur as intended. Different paths from here may include more drastic measures, while others consider salient solutions that require collaboration in order to be effective. An extension of the federal funding match program that decreased in 2020 is possibly a means of promoting expansion in those states that have chosen not to by displaying continued federal support of these efforts to reduce the uninsured. In addition, a special session in Congress with a presentation on the effects of Medicaid expansion, highlighting the medical, financial, and social impacts, could also prove useful at encouraging a country-wide expansion. Lastly, an amendment to the original ACA, reinstating the federal mandate to push for expansion is another mechanism—notably more difficult—that would result in the reversal of the National Federation of Independent Business v. Sebelius decision, which would effectively and promptly enforce the national effort of promoting access to healthcare. Overall, Medicaid expansion has proven to be one of the most beneficial healthcare initiatives in over a decade leading to increased coverage, access, and economic prosperity. As a nation, we must come together on this issue to advocate and stimulate change for everyone in this country, because the ability to be healthy and seek help should be a right, not a privilege, in one of the most developed nations in the world.

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Acknowledgements

Yolangel Hernandez Suarez, M.D., MBA – Leadership and Advisor
Eric Feldman – Leadership, Advisor, and DC Coordinator
Caroline Ezekwesili – Advisor
Uchechukwu Uzomah – Research Brief Editor
Sakhi Shah – Research Brief Editor