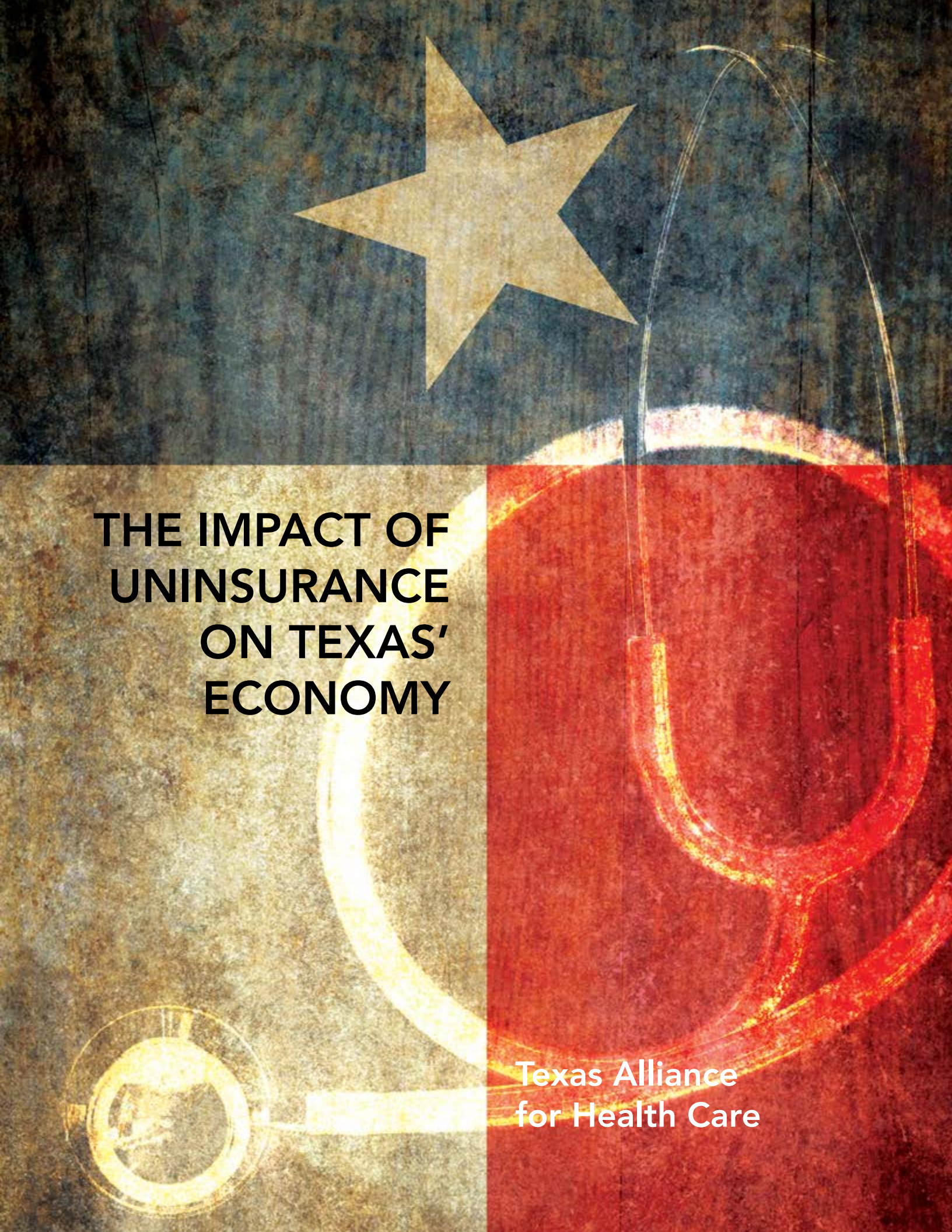


THE IMPACT OF UNINSURANCE ON TEXAS' ECONOMY

Texas Alliance for Health Care

If Texas does not address the issue of uninsurance in a proactive way, it is estimated that by 2040, over 6.1 million Texans will be uninsured. By then, Texas could see the loss of $178.5 billion dollars due to both lost earnings and the value of poor health attributable to the lack of insurance.

TEXAS ALLIANCE FOR HEALTH CARE

Delegates: (partial)

Center for Health Care Services

Community Health Choice

Cook's Children's Health Plan

Center for Public Policy Priorities

Driscoll Children's Health Plan

Episcopal Health Foundation

First Care Health Plans

Harris Health System

Health Policy Institute, Texas Medical Center

Houston Endowment

Texas Impact

Texas Association of Community Health Plans

Texas Association of Community Health Centers

Texas Association of Business

Texas Hospital Association

Texas Medical Association

Texas Organization of Rural and Community Hospitals

Young Invincibles

TEXAS ALLIANCE FOR HEALTH CARE

(Report on the Economic Impact of the Uninsured on the Texas Economy)

January 2019

The Alliance was created as a broad-based resource to policy makers for issues pertaining to health policy and coverage. We are a diverse group of stakeholders from private and public sectors representing hospitals, health plans, community clinics, philanthropy, other providers, business, and public health. Our goal is to provide well thought out research and policy recommendations that will inform and offer guidance on the impact of proposed changes in the finance and delivery of health care in Texas.

We are currently managing three work streams: role of the Texas Department of Insurance (TDI), the marketplace and coverage, and Medicaid. In February of 2017, the Alliance commissioned Manatt to research Capped Federal Medicaid funding; implications for Texas. The timely analysis explored the anticipated impact of block funding and was cited broadly during the national debate.

Today the Alliance has commissioned Applied Policy Group, with oversight by Dr. Mark McClellan, to perform an analysis of the financial impact on Texas' economy maintaining a high level of uninsured today, five, ten and twenty years out. (See findings below.) This report has been published to inform public policy makers on the uninsured economic impact on the Texas economy.

The Alliance is well positioned as an honest broker bringing disparate interests together to advance common ground in Texas and D.C. An adjunct activity to the Texas Alliance is the D.C. Dinner group. Led by WRG, this group meets several times a year in D.C. to exchange insights. At the national level we are working with a broad cross section of interests representing Catholic Health Association, American Medical Group Association, Health Care Leadership Council, Tivity, Council for Affordable Health Coverage, US Chamber of Commerce and National Retail Federation, Health Care Value Hub, Families USA, Third Way, American Public Health Association, etc. This work is intended to help inform our state efforts.

For more information contact Jon Comola jrcomola@wrgh.org.

Highlights:

The rising number of uninsured in Texas undermines our economy. Texas has the greatest number of uninsured of any state in the nation and we pay dearly for it.

- Today Texas has 4.8 million Texans under the age of 65 without health insurance—17% of the population, a rate almost double the national average. If we continue down this road, by 2040 there will be 6.1 million Texans under the age of 65 without health insurance.
- Lack of health insurance affects people in two ways: it leads to worse health, and as a result of that it reduces their earning ability. In 2016, the cost of lower lifetime earnings and worse health for uninsured Texans was a whopping $57 billion – and on the present path that cost will be $178.5 billion in 2040!
- Uninsurance also affects Texas employers. We know that lack of insurance increases absenteeism and presenteeism among the employed. Poor health is also a significant reason why people drop out of the labor force, potentially robbing employers of skilled workers.
- Our communities are also hit hard. Unsubsidized uncompensated care provided by hospitals and physicians was $3.5 billion in 2016 and if we do nothing to change this trend it will be $12.4 billion by 2040.
    - In addition to this uncompensated care, state and local governments help finance care of uninsured Texans. The Institute of Medicine reminds us that this results in a higher tax burden at the local level or the diversion of resources from other public purposes.
    - What's worse, the IOM notes, is that state and local governments' capacity to finance health care for uninsured persons tends to be weakest at times when the demand for such care is likely to be highest (i.e., during periods of economic recession).
- It may surprise you to learn that that the lack of coverage also undermines family wealth.
    - Nationwide, 20% of insured families and 53% of uninsured families had problems paying medical bills, according to data from KFF/NYT. This means that 1.2 million uninsured Texans in 2016 lived in families facing medical bills they had trouble paying.
    - The problem is not limited to low-income families, either: 14% of families with income above $100,000–13% of insured families and 29% of uninsured families–reported problems paying medical bills. More than half of uninsured families facing trouble with those bills reported that they had used up most or all of their savings to pay for medical care, and almost two-thirds reported cutting back on spending for food, clothing, or basic household items.
    - Not only does lack of insurance impoverish families: it reduces what they spend in the economy as well, as personal wealth is being directed toward health care costs.

Contents

High Rates of Uninsurance Hurt Texas Workers, Businesses, and Health Care Providers

In 2016, almost 5 million Texans under the age of 65 (approximately 16% of the state's population) were without health insurance, almost double the national average.[1] Without intervention, by 2040, there will be an estimated six million Texans under the age of 65 without health insurance. Uninsurance impacts Texas households, businesses, health care providers, and the Texas economy as a whole.

We estimate that without action to correct the situation, Texans who were uninsured in 2016 will lose an estimated $57 billion in lifetime earnings; by 2040, the value of "health loss" — or the value of lost earnings and poor health due to uninsurance in Texas — is estimated to be $178.5 billion ($74 billion in 2016 dollars). The high uninsured rate impacts the Texas economy by negatively affecting labor productivity, business profitability, household financial stability, and future earnings and requires health care providers to absorb the costs of unsubsidized, uncompensated care. In short:

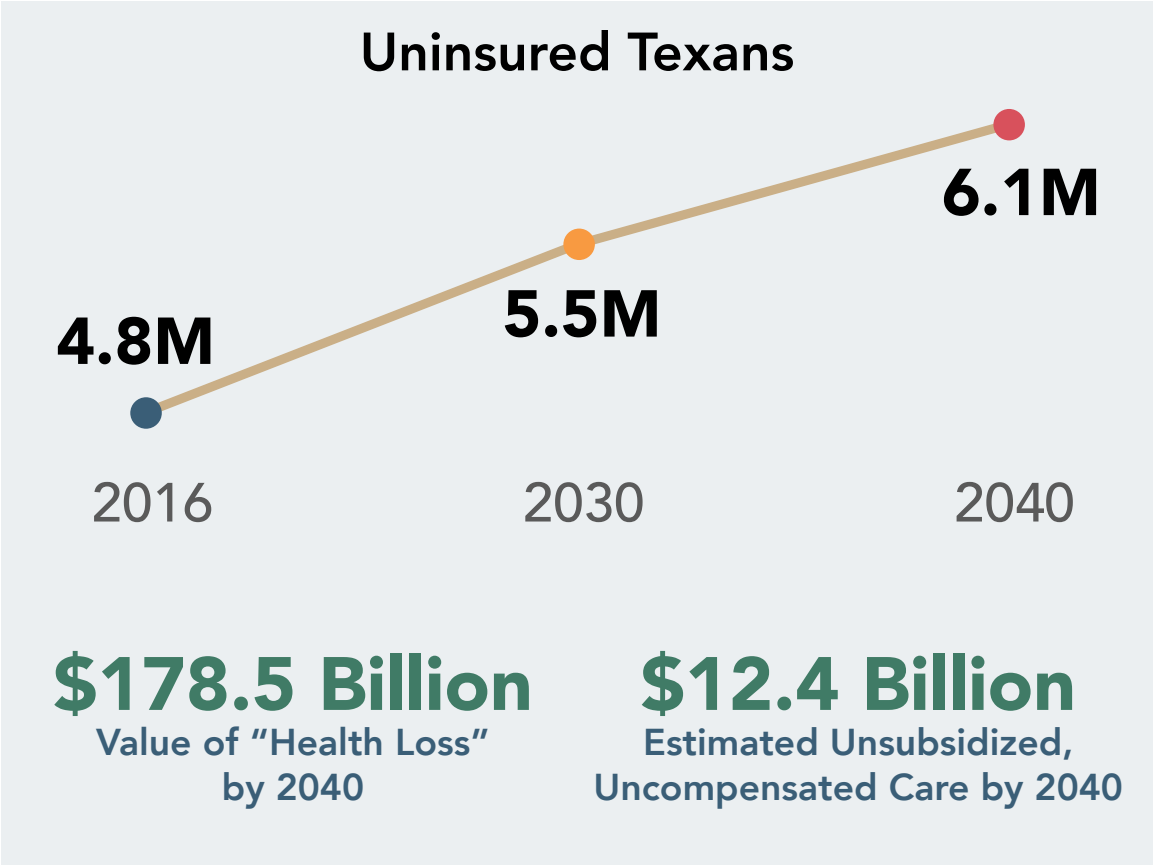
- Workers without health insurance miss more days of work than workers with health insurance.[2] Presenteeism and absenteeism affect labor productivity, which affects business profitability.
    - This, in turn, affects the rate of economic growth for Texas.
- Lack of insurance increases poor health outcomes and rates of premature death for Texans; this affects future earnings and the Texas economy.
- Lack of insurance affects the creation of family wealth, as well as the immediate financial stability of families in Texas.
- Lack of insurance affects Texas communities, doctors, and hospitals to the extent that they must absorb the cost of care for uninsured patients.

> By 2030, more than 16% of Texans are estimated to be uninsured, a rate that would exceed the predicted national uninsurance rate by 45%.

Texas $178 Billion

Our analysis found the following:

- In 2016, there were approximately 4.8 million Texans (about 16% of the population) without health insurance. Assuming stability of demographic trends and rate of insurance:
    - By 2030, there will be more than 5.5 million Texans without health insurance. This would be more than 16% of the state's population and would exceed the estimated national rate of uninsurance by 45%, as the Congressional Budget Office (CBO) estimates that by 2027, the national uninsurance rate will be 11%.
    - By 2040, there will be more than 6.1 million Texans without health insurance.
- The continued lack of insurance is anticipated to have a negative impact on Texas hospitals and health



care providers due to unsubsidized, uncompensated care. By 2040:

  - It is estimated that Texas health care providers will have to provide $12.4 billion in unsubsidized uncompensated care if current uninsurance rates continue.
  - The value of "health loss" — or the value of lost earnings and poor health — is estimated to be $178.5 billion ($74 billion in 2016 dollars).

- The data shows that there is a strong correlation between insurance status and the likelihood that a household will face problems with medical payments.
  - If Texans who are currently uninsured were offered coverage equivalent to the average insurance plan available in the state, it is estimated that the number of their households reporting problems paying medical bills would drop by half.
- The pressure of medical bills can cause households to reduce spending in other areas, which can have a downstream impact on other sectors of the economy. In a national survey, almost three-quarters of people who reported problems paying medical bills said that they reduced spending on food, clothing, and basic household items to pay medical bills.
  - Similarly, 72% of respondents (including those who were insured and uninsured) reported that they had delayed major household purchases because of medical bills; almost 60% had used all or most of their savings paying medical bills.

Uninsurance Negatively Impacts Texans' Health and Household Wealth Spending Allocation

The state of Texas is falling behind other states on measures of insurance status. The average Texan is more than twice as likely to be uninsured than the average American. Texans also have lower rates of access to all types of insurance: employer-sponsored, direct-purchased private plans, and government programs.[3] Our initial analysis estimates insurance coverage trends for Texans assuming no changes to existing policies.

Over the next 20 years, Texas can expect a slight decrease in employer-sponsored insurance (ESI) coverage, coupled with a slight increase in other commercial insurance (which would include health plans purchased on or off the Exchange) and a larger increase in Medicare coverage, which reflects general demographic trends of an aging population. Medicaid enrollment is projected to stay stable, and the uninsurance rate is expected to decrease modestly to 16%. While the Congressional Budget Office (CBO) only issues projections 10 years into the future, the CBO predicts that in 2027, approximately 11% of Americans nationwide under the age of 65 will be uninsured,[4] indicating that Texas would continue to have an uninsurance rate higher than the national uninsurance rate.

Studies demonstrate that a lack of insurance commonly results in poorer health status, and that once an individual gains insurance, he or she experiences improvements in health outcomes, resulting in cost-savings for the state.

Impact of Uninsurance on Health Outcomes

Studies demonstrate that a lack of insurance commonly results in poorer health status, and that once an individual gains insurance, he or she experiences improvements in health outcomes, resulting in cost-savings for the state.

Insurance Type*	Actual 2016	Projected > 2030	2035	2040
Employer-Sponsored Insurance (ESI)	50.3%	49.2%	49%	48.8%
Other Commercial Insurance	11.9%	12.7%	12.9%	13.1%
Medicare	13.4%	17.6%	18.6%	19.3%
Medicaid	17.6%	17.4%	17.5%	17.4%
Other	4.8%	5.3%	5.4%	5.5%
Uninsured	**17.2%**	**16.4%**	**16.1%**	**16%**

*Numbers exceed 100% because individuals may have more than one form of insurance at the same time; for example, an individual may be dually eligible for both Medicare and Medicaid.

For example:

- Uninsured adults are less likely to receive wellness checks, blood pressure and cholesterol tests, blood sugar screenings, colon cancer screenings, and pap smears or mammogram screenings;[5] all of these are essential for preventative care.

- Uninsured individuals are also more likely to delay or go without needed medical care, resulting in poorer health outcomes, including cancer diagnoses at more advanced stages, poorly-managed diabetes and hypertension, and worse health outcomes after a stroke, respiratory failure, or cardiovascular disease;[6,7]

- For adults in their 50s and 60s, being continuously uninsured results in a relative risk of a major decline in overall health of 1.63 and being intermittently uninsured results in a relative risk of major decline in overall health of 1.41 compared to adults who were continuously insured;[8] and

- There is an association between lack of insurance and mortality, with studies showing that uninsured adults have a 25% greater chance of dying compared to privately insured adults,[9] and a greater risk of dying after an acute myocardial infarction;[10] hospitalized adults who lack insurance have a higher risk of hospital mortality than do insured hospitalized adults (1.16 odds ratio).[11]

Individual health outcomes improve once people obtain health insurance:

- Uninsured adults aged 55 to 64 years old report statistically significant improvements in health once they reached age 65 and became eligible for Medicare;[12]

- Young adults aged 19 to 25 who were uninsured and then gained health insurance report an increase in self-reported physical and mental health status, despite not increasing their utilization of health care services;[13]

- There are significant improvements in access, utilization, and self-reported physical and mental health after one year of coverage for previously uninsured adults.[14]

- One recent study estimated that it cost between $327,000 and $867,000 (in 2007 dollars) in lifetime medical expenses to save one life. The most-recent estimate of the value of a statistical life calculated by the federal government ($7.4 million in 2006 dollars) is close to 10 times higher than that, meaning that on a statistical level, investing in insurance results in a surplus.[15]

A meta-analysis of studies performed in the past 10 years shows strong evidence that access to health insurance is associated with increased rates of having a usual source of care and being able to afford care when needed. The Centers for Disease Control and Prevention's 2016 National Health Interview Survey (NHIS) found that 78% or more of those with Medicaid or private health insurance reported having a usual place of care, compared with 46% or less who were uninsured.[16] Increased access to preventive care services is also associated with statistically significant increases in testing for diabetes, hypercholesterolemia, HIV, and cervical, prostate and breast cancer. Low-income adults with insurance are more likely to receive selected health care services, such as mammograms, colon cancer tests, and cholesterol, blood pressure, and blood sugar checks, compared to those without insurance.[17] Studies have been mixed on the impact of emergency department use and hospitalizations; some studies have shown that expanded access to health insurance leads to reduced utilization, while others have shown increased utilization, though it is not always clear if the care provided was critical or low-value.[18]

While improved access to care does not always equate with improved health outcomes, studies indicate clear correlation between access to care and better outcomes with certain health conditions. For example, studies indicate that depression, which is one of the leading causes of disability in the United States for adults in their prime working

years,[19] is one chronic condition that has been found to improve with access to care.[20] Studies have also found that earlier-stage diagnosis and treatment of cervical cancer in young women increases with increased access to care.[21] In Massachusetts, there was an increase in low-income patient access to potentially curative surgery for early-stage colon cancer after gaining access to coverage.[22]

In 2016, less than 34% of low-income adults with either Medicaid or private health insurance reported having unmet medical needs, compared with 50% or more of those without insurance.[23] When comparing reported health status of uninsured, low-income adults in Medicaid expansion and non-expansion states, the NHIS found that a larger percentage of people reported being in "good" health and a smaller percentage reported "fair or poor" in expansion states. However, studies have not shown a relationship between gaining access to health insurance coverage and better blood sugar control, hypertension, or cholesterol levels.[24]

"Being uninsured can be devastating. People without health coverage have much less access to preventive, acute, and ongoing medical care than those with insurance, which can lead to delayed care, later diagnosis of easily detectable or preventable diseases, worsening of chronic conditions, higher costs, and potentially serious financial hardship," said Dr. Eduardo Sanchez, Chief Medical Officer for Prevention at the American Heart Association.

There is a discrepancy in the estimates of deaths each year that can be attributed to the lack of insurance coverage. However, modeling of population-level data estimates that expanded coverage does lead to lower-than-expected mortality rates, particularly among previously uninsured individuals diagnosed with HIV. A recent study estimated a reduction in mortality of up to 6% could be attributable to the gain of health insurance coverage.[25] Not only is reduced mortality a net positive for individuals and families, but reduced mortality also benefits employers and the government as individuals are able to continue to work.

The maternal mortality rate for Texas mothers has been the subject of several scholarly reports in recent years, so much so that the state legislature has convened a task force to study the issue.[26] "Women with Medicaid insurance lose their coverage 60 days after delivery, yet the many complications of pregnancy haven't been resolved, like high blood pressure and diabetes," said Mary Dale Peterson, Executive Vice President and Chief Executive Officer of Driscoll Health System. "Too many of these women are dying, leaving their newborns without a mother."

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Household Wealth Accumulation

As mentioned previously, the expected loss of income for Texans who were uninsured in 2016 over their lifetimes (assuming they remain uninsured until age 65) is $57 billion. Looking forward, the value of "health loss," or the value of lost earnings plus the loss of value attributable to poor health for Texans, could reach as high as $178.5 billion ($74 billion in 2016 dollars) if no changes are made to current policy.

Americans spend more money on health care services per year than any other nation in the world, both in terms of absolute spending and as a percentage of gross domestic product. In 2016, health care spending increased to $3.3 trillion, a 4.3% increase over 2015 spending levels. This represents almost 18% of gross domestic product (GDP).[27] Comparatively, Switzerland spends 12% of GDP; France, Germany and Japan spend 11%

of GDP; and Canada and the United Kingdom spend approximately 10% of GDP on health care each year.[28]

Hospital care makes up the largest portion of U.S. health care expenditures (32%), while physician and clinical services comprise 20%, and prescription drugs account for 10% of spending.[29] Private health insurance accounts for 34% of health care expenditures; however, the combined spending of Medicare and Medicaid accounts for 37% of expenditures. While year-over-year expenditures continue to rise, the rate of the annual increase slowed between 2014 and 2016.

Like other expenditures, health care expenditures require households to make trade-offs; a dollar spent on health care is a dollar that cannot go towards something else, such as savings or assets. "In the case of trauma or a catastrophic event such as heart attack, stroke, or cancer, an uninsured patient's recovery will come with significant financial hardship," added Dr. Sanchez of the American Heart Association. "Patients may have to miss work, lose their jobs, and continue to accrue debt, while public and private healthcare systems take on the burden of the cost of care that cannot be paid for. This ruinous spiral could be reversed by finding a way to increase the percentage of Texans with health insurance."

According to a recent survey, 37% of very sick people used most or all of their savings paying hospital bills, and 23% reported being unable to pay for basic necessities such as food, heat, or housing as a result.[30] Another recent survey found that approximately 40% of American adults said that they did not have $400 to cover an unexpected expense; 25% reported having no retirement savings or pension. A larger 56% of very sick people reported having difficulty paying one or more of their health care bills, and 27% reported that their illness was a major source of financial strain on their household.[31]

More than 25% of adults reported avoiding necessary medical care due to affordability concerns.[32] Avoidance of necessary medical care for affordability concerns could manifest in skipping prescription doses, delaying filling a prescription, taking less medication, or requesting a lower cost drug. Comparatively, the CDC's 2016 NHIS found that 12% or less of low-income adults with Medicaid or private health insurance reported financial barriers to needed medical care, such as eyeglasses, prescription medication, mental health evaluation and counseling, or attention from a specialist or dental professional.

Uninsured individuals with savings are more likely to devote those savings to paying health care bills than individuals that have insurance;[33] this dynamic can lead to bankruptcy. A survey of 1,000 Americans who filed for bankruptcy in 2007 found that medical debt was cited as the reason for declaring bankruptcy in 62% of cases. Comparing those results to a 2001 study, the authors concluded that between 2001 and 2007, the incidence of medical debt-related bankruptcies would increase almost 50% during that time-period.[34] As recently as 2014, half of debt collections are related to medical debts.[35]

When uninsured households gain insurance coverage, there is evidence that the newly-insured individuals are 40% less likely to borrow money to pay medical bills or to skip medical payments. The individuals in the study were also 25% less likely to have medical debt sent to a collections agency.[36] This infers that a lack of health insurance, especially among low-income populations, can lead to increased debt and that access to health insurance may reduce — but not eliminate — the need to accumulate medical debt.

"Patients may have to miss work, lose their jobs, and continue to accrue debt, while public and private healthcare systems take on the burden of the cost of care that cannot be paid for. This ruinous spiral could be reversed by finding a way to increase the percentage of Texans with health insurance."

– Dr. Sanchez of the American Heart Association

Uninsurance Costs Employers Through Reduced Employee Productivity and Household Discretionary Income

Our analysis estimates that by 2040, the value of "health loss" — or the value of lost earnings and poor health due to uninsurance in Texas — is estimated to be $178.5 billion ($74 billion in 2016 dollars). Health insurance coverage results in a more consistent stream of care for individuals, which leads to increased preventive care visits and greater clinician attention for chronic conditions and in the event of an illness or injury. Sufficient access to primary and specialty care and coordinated patient services improve the individual's overall health.

Healthier individuals, and thus healthier employees, miss less work as a result of reduced number of sick days, doctors' appointments, or the travel time needed to receive care. The U.S. Bureau of Labor Statistics (BLS) defines an absence from work as missed work due to own illness, injury, or medical problems; child care problems; other family or personal obligations; civic or military duty; and maternity or paternity leave. Illness and injury are the most common reasons for absence, and the BLS collects data on absence due to those separately from the other reasons. In 2017, the average full-time worker missed almost 2 days of work due to illness or injury.[37]

Annually, 407 million days of work are missed by 69 million workers in the United States because of illness.[38] An additional 478 million days were negatively affected because of an estimated 55 million workers' inability to concentrate while at work due to sickness. This results in $260 billion dollars lost in economic productivity.[39] According to the Institute of Medicine's Committee on the Consequences of Uninsurance, there is an economic loss of $65 to $130 billion per year for Americans who are uninsured because of decreased health status and premature mortality.[40]

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>
> — Jeff Mosley
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Healthier employees also have lower rates of "presenteeism," which is when an employee is present at work but is less productive due to poor health, and are more productive contributors to the workforce for the time they are in the office, resulting in better employer outcomes. In short, a lack of health insurance reduces labor productivity and increases presenteeism and absenteeism, subsequently impacting the success of the economy.

Productivity, Presenteeism, and Absenteeism

Certain conditions have a greater impact on job productivity and absenteeism. On average, hypertension, heart disease, mental illnesses, and arthritis cost between $330

Case Study One

In 2002, a group of researchers randomly selected over 12,000 full-time Dow Chemical Company (Dow) employees in Michigan and Texas to participate in a health survey online that identified their chronic conditions. Participants also completed the Stanford Presenteeism Scale and a Work Limitation Questionnaire. Based on survey responses, the researchers calculated total annual health costs based on their medical treatment costs (such as appointments and pharmacy expenses), absenteeism costs, and presenteeism costs. They found that chronic conditions alone are estimated to cost Dow more than $100 million annually in lost productivity for its U.S. workforce.[43]

Case Study Two

An illustrative example of the relationship between uninsurance and workplace productivity lies in mental health care. About 7.5% of the U.S. workforce has depression according to analyzed data from the National Comorbidity Survey Replication.[44] In turn, depression costs employers an estimated $187.8 billion per year in healthcare costs, absenteeism, and lost productivity. These costs may fluctuate, however, when employees receive the treatment needed to manage their condition.

Case Study Three

A March 2018 report from the Texas House of Representatives Select Committee on Economic Competitiveness stated there are approximately 300,000 people in Texas with severe mental health needs who are not receiving the appropriate care.[45] In 2016, the U.S. Department of Health and Human Services (HHS) released data showing that only 9.4% of the uninsured population in Texas received treatment for mental illness[46] and that Texans with health insurance were approximately 50% more likely to receive mental health treatment than those without insurance.[47] Relatedly, Texas ranks 43rd in mental health outcomes in state comparisons.[48] The assumed impact on Texans' productivity, therefore, is significant.

Case Study Four

Research shows that uninsurance also impacts productivity and absenteeism of family members and caregivers in addition to the uninsured individual. In 2006, a Metlife study estimated that the total cost to employers for full-time employees with significant caregiving responsibilities is $17.1 billion per year. These costs are associated with absenteeism, workday interruptions, crisis in care, replacing employees, and reducing hours from full- to part-time.[49]

Case Study Five

To thoroughly examine the impact of uninsurance on economic productivity in Texas, uninsured children and absenteeism from school should also be considered. In 2016, researchers found that Texas ranks second worst in the nation for its number of uninsured children.[50] Similar to adult employees with health insurance, children with health insurance have fewer school absences than the uninsured because they receive more preventive care, such as flu shots, and have improved overall health. Additionally, students are less likely to miss school if their parents are in good health and they are more likely to miss school if their doctor's office is more than one hour away.[51] Physical presence in school is related to student achievement, graduation rates, and education quality. As we project forward, the younger generations will become members of the workforce, bringing with them their quality of education and impacting economic productivity as future employees.

and $400 per year per employee.[41] Research shows that presenteeism accounts for 20% to 60% of the total costs and usually accounts for a higher proportion than direct medical costs. In April 2018, the Centers for Disease Control and Prevention (CDC) estimated that at least 60% of Americans have at least one chronic condition and more than 40% have two or more, which may contribute to levels of both presenteeism and absenteeism.[42]

"Without access to preventative health care, our workforce is compromised by absenteeism that limits Texas employers' access to a reliable and consistent workforce. Texas employers should not struggle to find the skilled workers they need, nor lose employees falling out of the workforce altogether due to unmanaged illness," said Jeff Mosley, the Chief Executive Officer of the Texas Association of Business (TAB).

Household Discretionary Income and Allocation of Resources

As mentioned previously, in addition to direct impact on employers, uninsurance can also have an impact because it requires families to spend income on medical care, not on other goods and services. This change in spending impacts the larger economic health of Texas. While an increased rate of health care consumption due to poor health may be beneficial to hospitals and health care providers (assuming they are able to collect the money due), it can cause spending to decline in other areas.

In a national survey, almost three-quarters of Americans who reported problems paying medical bills (both insured and uninsured) said that they cut back spending on food, clothing, and basic household items in order to pay medical bills. The same percentage said that they had delayed major household purchases because of medical bills, and 60% reported using up all or most of their savings paying medical bills.[52] Uninsurance, and the higher rates of medical spending that may be attributed to it, can drain money out of non-health care-related industries, especially those, such as entertainment, dining in restaurants, and tourism, that may be considered discretionary by families.

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Uncompensated Care Impacts State, Regional, and Local Government Spending

We estimate that if Texas remains on its current path, by 2040, Texas health care providers will be liable for $12.4 billion in unsubsidized, uncompensated care, compounding the struggles healthcare providers in Texas already face. Texas' unsubsidized, uncompensated care costs tripled between 2002 and 2011, starting at $2.0 billion and climbing to $6.2 billion.[53] It has the highest amount of unsubsidized, uncompensated care as a percentage of total revenue amongst the next six most populous states.[54]

Without sufficient financial support for unsubsidized, uncompensated care from the federal government, costs of care for uninsured populations, especially at public institutions, are often transferred to state, regional, and local governments. A community's high health care spending needs require state and local governments to either generate additional revenue via public taxes, divert resources from other public programs and initiatives, apply discretionary revenues, or fail to reimburse providers for unsubsidized, uncompensated care. State and local governments are often limited in the types and amount of tax revenue they are permitted to collect and have to balance their budgets on an annual basis, which results in significant pressures on these governments for funding for health services.

"[The Tarrant County Hospital District] has well over a million encounters a year with patients that are uninsured or underinsured and as the only safety net for behavioral health treatment in Tarrant County, our system is stretched beyond capacity both financially and physically," said Trent Petty, current Chairman of Planning and the former Chairman of Finance, and Chairman of the Board of the Tarrant County Hospital District ("JPS"). "The current state and federal model is completely unsustainable at the local level and will continue to be a growing burden on the Texas economy."

"JPS Health Network is proud to have served the un- and underinsured population of our community for more than a century," added Charlie Powell, Chair of the Tarrant County Hospital District Board of Managers. "Approximately 40 percent of the care we provide is uncompensated and subsidized by local property taxes. As Tarrant County's population continues to grow, the number of residents eligible for the JPS charity program is expected to increase by 46 percent in the next 20 years. That growth will strain the ability of JPS and local taxpayers to meet the future healthcare needs of the county."

According to the Texas Comptroller, in 2017 health care spending represents about half of the Texas state budget and state government spending on health care rose by 19.7% from 2011 to 2015.[55] This growth rate exceeded inflation and the growth of the Texas population. "Health care" in this context included hospital, physician, home health, nursing and residential care, prescription drugs and durable medical equipment,

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> Chairman of Planning
> Tarrant County Hospital District

Medicare, Medicaid, and CHIP, as well as workers' compensation, maternal and mental health, and non-commercial public health research.

To the extent that state and local governments are one of several stakeholders required to absorb the costs of unsubsidized, uncompensated care, high rates of uninsurance place added pressure on government spending. Continually increasing rates of state spending on health care restricts the state's ability to support other programs that stimulate economic growth, such as education, transportation and infrastructure improvements, and economic development activities.

"As the Executive Director of the Texas Conference of Urban Counties from 1995 thru 2017 it was obvious that the high uninsured and underinsured population of Texas was a major challenge for local communities," said Don Lee, former CEP of the Urban Counties Association. "Some large urban counties in some years have devoted as much tax resources for indigent health care as all other county functions combined — including investment in new infrastructure. Few things would help local communities more than a significant reduction in the number of uninsured Texans."

Impact of Uninsurance on Hospitals and Physicians

The burden of uncompensated care impacts the financial stability and performance of hospitals and physicians. Of the total unsubsidized, uncompensated care costs reported by Texas hospitals in 2018, 63% ($4.5 billion) were for uninsured care.[56] These costs decrease revenue and increase bad debt for providers, tightening margins and putting pressure on facility operations. We estimate that by 2040, Texas health care providers could face as much as $12.4 billion in unsubsidized uncompensated care if current uninsurance rates and trends continue. The Texas 1115 Waiver renewal in December 2017 granted $2 billion less than the previous 1115 Waiver for uncompensated care. Without a solution for appropriate compensation for the care provided to this population, providers are likely to continue to face financial hardship and the possibility of closure.

"As the Executive Director of the Texas Conference of Urban Counties from 1995 thru 2017 it was obvious that the high uninsured and underinsured population of Texas was a major challenge for local communities," said Don Lee, former CEP of the Urban Counties Association.

Hospitals

In April 2017, new Baylor, Scott & White Health CEO Jim Hinton stated that he saw uncompensated care as the biggest challenge for Texas. Mr. Hinton said to The Dallas Morning News that, "[It] is important that we never act like it's OK for Texas to have such a high rate of uninsured. Our mission is to take care of all people, and we're going to do it regardless of their ability to pay. But that cost gets shifted onto somebody."[57] "The consequences of such a high uninsured rate are many and includes a significant uncompensated care burden for hospitals (more than $7 billion annually), higher costs for the privately insured, higher costs for local taxpayers and reduced productivity and profits for Texas employers," said John Hawkins, Senior Vice President, Advocacy and Public Policy, Texas Hospital Association.

In February 2018, Baylor, Scott & White Medical Center-Garland announced that it would be closing. Hospital administrators pointed to "significant operational challenges through the years" and "an increasingly difficult financial outlook and unprecedented market uncertainty" as reasons for the closure.[58] To Becker's Hospital Review, the health system stated that "the hospital has incurred significant financial losses over the last three years, and the trajectory of the loss is now unsustainable, as last fiscal year's loss

was more than five-times the loss incurred the prior fiscal year."[59] The closure impacted approximately 711 employees of the facility.

Taking the matter one step further, Baylor, Scott & White Health announced in October 2018 that it intends to merge with Houston-based Memorial Hermann Health System in 2019. Mr. Hinton pointed to "cost issues" as a motivating factor behind the decision. Chuck Stokes, CEO and President of Memorial Hermann, described his health system as a safety-net for Houston just like Baylor, Scott & White is for Dallas. He stated that "about 17% of Houston's population is uninsured, which is the largest share of uninsured individuals in a metro market in the country" and that "Memorial Hermann has reached capacity in some of its facilities." He went on to say, "We have to figure out how we can continue to strengthen our communities so we can be true to our mission."[60] Experts suggest that while hospital mergers can lead to reductions in operating costs, they result in an increase in the average price of hospital services between 6% and 18%.[61]

The experiences of Baylor, Scott & White Health and Memorial Hermann Health System mirror that of many other providers in Texas. The number of hospital closures in Texas continues to mount, with rural hospitals especially closing at alarming rates. According to John Henderson, CEO of the Texas Organization of Rural and Community Hospitals (TORCH), "[t]wenty rural Texas hospitals have closed since 2013, double the rate of any other state. The cost of providing care to uninsured patients was a factor in every one of them."

A Government Accountability Office (GAO) report released in August 2018 found that Texas represented only 7% of the nation's rural hospitals in 2013 but accounted for 22% of the rural hospital closures from 2013 through 2017.[62] In 2017, three of the five hospitals with the highest bad debt ratios were in Texas: Texas General - Grand Prairie Hospital in Grand Prairie, Ennis Regional Medical Center in Ennis, and John Peter Smith Hospital in Fort Worth.[63]

This is problematic given that rural populations already have more limited access to health care than their urban counterparts, are more likely to be uninsured and remain uninsured for longer periods of time, to engage in risky health-related behaviors, and to experience higher rates of chronic conditions than urban populations.[64] According to *Healthcare Finance*, Texas' rural hospitals at risk of closing serve approximately 15% of the population and "that population, kept healthy by the presence of their rural hospitals, drives the state economy, from food production to fuel."[65] CEO of Coryell Hospital David Byrom stated that rural hospitals in Texas create more than 22,000 jobs and a combined economic impact of more than $18 billion a year. "The rural health safety net is buckling under pressure due to the uninsured crisis facing Texas," said Robbie Dewberry, Mitchell County Hospital District.

Research on the impact of hospital closures on community economic health found that the closure of a community's sole hospital lowers per-capita income by 4% on average. In communities with multiple sources of hospital care, closures decreased per-capita income for two years following the closure.[66] This is largely due to the number of individuals employed in the hospital setting as well as the other businesses in the region that support the hospital, such as food service or construction.[67]

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Additionally, closing hospitals has a negative financial impact on surrounding hospitals, particularly for not-for-profit institutions. Surviving hospitals absorb the patients from the closing hospital and inherit the costs of their care.[68] Therefore, not only do hospital closures interrupt patient care and change the necessary transportation for patients to receive their care, closures also transfer the burden of high-cost patients to surviving hospitals, reducing the community's access to care and leaving the problems of unsubsidized, uncompensated care unsolved.

"Texas leads the country in uninsured population, and because of demographic challenges, rural Texas serves an even higher percentage of people with no coverage," said Ted Matthews, CEO of Eastland Memorial Hospital. "This has a crippling effect on the rural healthcare infrastructure."

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Providers

The burden of unsubsidized, uncompensated care is not an issue faced by only hospitals but by providers as well. In 2013, approximately 60% of the $75 billion spent on uncompensated care was hospital-based; the remaining 40% was community-based. Office-based physicians had an estimated unsubsidized, uncompensated care cost of $10.5 billion in 2013, which comprised 14% of the total unsubsidized, uncompensated care costs.[69]

Emergency physicians, who are required to treat patients regardless of insurance status, are negatively impacted by the uninsured. Uninsured persons may choose to visit the emergency department to receive basic care or may require emergency attention for serious or chronic conditions because they did not otherwise receive the necessary preventative care. According to the American Hospital Association, emergency departments serve over twice the number of uninsured patients as physicians' offices.[70] Additionally, care provided in the emergency department can be between two and five times more expensive than in an alternative setting.[71] In 2003, a study comparing actual reimbursement of emergency physicians versus expected reimbursement based off of the Medicaid and Medicare fee schedules found that the amount of emergency physicians' non-reimbursed care of the uninsured is substantial.[72] For the state of Michigan, where the study was conducted, emergency physicians lose approximately $25,408,000 per year in potential reimbursement.

Historically, Medicaid reimbursement rates have been lower than either Medicare or commercial payers. The low payments have led to access problems for Medicaid recipients, since not all providers accept Medicaid patients . In 2015, the most recent year for which data is available, approximately 60% of office-based physicians in Texas reported that they were accepting new Medicaid patients, compared with a national average of 69%. Comparatively, 89% of office-based physicians nationwide report accepting new privately insured patients.[73]

There appears to be a correlation between reimbursement rates and the willingness of physicians to accept Medicaid patients. In Montana, where Medicaid rates are equivalent to Medicare reimbursement rates, almost 90% of physicians accept new Medicaid patients.[74] Peer-reviewed studies of Medicaid participation rates in 2013 and 2014, in which Medicaid payments for primary care were increased nationwide under the ACA, showed that higher Medicaid reimbursement rates were associated with improvements in patient access, better self-reported health, and fewer days of school missed among recipients.[75]

Uninsurance Negatively Impacts the Texas Economy and Workforce and Should be Addressed as a Business Issue

Uninsurance is a problem facing Texas that will only grow worse with inaction. Uninsurance not only impacts the individuals and households that are uninsured but also has adverse effects on employers, health care providers, and the economic allocation of resources. Today, almost 5 million Texans are uninsured, the highest percentage of any state, and almost double the national average. If that cohort of Texans were to remain uninsured until they turn 65 years-old, we estimate that they will experience $57 billion in lost lifetime earnings as a result of uninsurance.

"The disadvantages of uninsured or underinsured Texans are obvious. We are better than this, and we can prove it through a commitment to focused, innovative solutions. That's something that Texans are very good at doing when they commit to solving a problem," said the Honorable Robert Hebert, County Judge in Fort Bend County.

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If Texas does not proactively address the issue of uninsurance, it is estimated that by 2040, over 6.1 million Texans will be uninsured. By then, Texas could see the loss of $178.5 billion dollars due to both lost earning and the value of poor health attributable to the lack of insurance. By 2040, we estimate that Texas health care providers will have to provide $12.4 billion in unsubsidized uncompensated care if current trends continue.

"Texas families want better health care at lower costs, employers want healthier employees, and the State of Texas wants to control per capita spending on health," said Ken Janda, President and CEO, Community Health Choice. "How do we achieve all three goals? Coverage. Just think: when we fail to deliver health coverage for our communities the downstream effect results in higher costs, worse patient outcomes, and more pressure on the budgets of Texas families as well as on state and local governments. Success starts with coverage—cover everyone first then move toward a value-based health care system that incentivizes smarter care and healthier behaviors. Coverage helps us save money and lives."

The financial strain on individuals and households due to uninsurance also impacts their allocation of resources. Data shows that there is a clear correlation between insurance status and the likelihood that a household will face problems with medical payments. If Texans who are currently uninsured were offered coverage equivalent to the average insurance plan offered in the state, we estimate that the number of households reporting problems paying medical bills would drop by half. In national surveys, almost three quarters of people who reported problems paying medical bills — both insured and uninsured — said that they reduced spending on food, clothing, and basic household items in response. Almost 60% reported that they

had used up all or most of their savings paying medical bills, leaving them vulnerable to financial problems in the future and making it difficult for them to build wealth.[76]

"We cannot sustain the 'Texas Miracle' without addressing the burgeoning uninsured and underinsured population in this state, especially among young Texans," said George Christian, President, Christian & Co. "We can't expect children to learn and grow if they can't get adequate health care. Nor can we keep putting Texas families in the precarious and stressful position of paying medical bills at the expense of food, shelter, clothing, and other life-sustaining needs. A state that has been as resourceful and future-facing as Texas can surely find solutions that work for all Texans, businesses and individuals alike."

The problem of uninsurance affects more than just those who are uninsured. Uninsurance leads to poor health and increases the chances that a family will face medical bills and financial difficulty. Poor health also leads to presenteeism and absenteeism among the employed and can be a factor in decisions to leave the workforce, meaning that uninsurance impacts Texas employers as well. "Right now, Texas is a state that's really moving business-wise, so much is happening here," said Douglas W. Curran, MD, President, Texas Medical Association. "We need to keep our people healthy so they're producing, they're generating, they're keeping things going. But if they're not properly cared for and supported and empowered, then the people we really need to keep our business environment pristine will begin to drift away. It's going to hurt all of us."

"[This] report clearly supports why Texas hospitals are advocating for efforts to increase the number of Texans with comprehensive health coverage, including creating a Texas-specific solution to facilitate the state's acceptance of federal funds to increase access to coverage for low-wage working Texans whose incomes are too low to qualify for the health insurance marketplace," said John Hawkins, Senior Vice President, Advocacy and Public Policy, Texas Hospital Association.

Unsubsidized, uncompensated care is already and will continue to be a problem facing health care providers and local and state governments. Finally, high medical expenses distort the spending of individuals, leading to a reduction in consumerism in areas such as food, clothing, housing, and travel to reallocate personal funds towards medical bills.

A state that has been as resourceful and future-facing as Texas can surely find solutions that work for all Texans, businesses and individuals alike."

— George Christian
President
Christian & Co.

Technical Appendix

Methodology

This report is designed to examine some of the impacts beyond the direct impact of insurance on an insured individual's health and to broaden the scope to look at how a lack of insurance affects broader issues. Lack of insurance affects employers, not just with regards to absenteeism or lower productivity due to poor health or caregiver responsibilities, but also in how unsubsidized, uncompensated care impacts premiums for those who purchase insurance. Lack of insurance impacts local, regional, and state economic growth. Lack of insurance impacts household wealth accumulation. Lack of insurance coverage also has negative impacts on hospitals and providers who administer unsubsidized, uncompensated care. Finally, lack of insurance affects Texas' economic health.

Data from several publicly available resources were used: the American Community Survey (ACS), which is compiled by the U.S. Census Bureau;[77] the Medicare Expenditure Panel Survey (MEPS), which is compiled by the Agency for Healthcare Research and Quality (AHRQ); State Health Accounts from the Centers for Medicare and Medicaid Services (CMS); and state demographic and economic projections prepared by the Texas Comptroller. The data were projected into the future and analyzed to answer the following questions:

1. What impact does lack of insurance and poor health have on Texas' economy?
2. What impact does the lack of insurance have on household wealth?
3. How does unsubsidized, uncompensated care impact health insurance premiums and out-of-pocket costs paid by employers and insured individuals?
4. How do these costs and others impact the economy and undermine economic growth?

We based our model of the Texas population on the 2016 American Community Survey (ACS).[78] The ACS allows us to break the population along a number of dimensions — age, sex, family income and structure, and point-in-time health insurance status being the most important for this exercise. There are about 262,000 sample respondents from the state of Texas in the ACS.

To add health expenditures to the Texas ACS dataset, we used the 2016 Medical Expenditure Panel Survey. We calculated average spending for several categories of expenditure as well as total spending for age/sex/insurance cells of the population and merged these averages onto each person record of the ACS. The result does not produce a person-level distribution of spending but does allow us to tabulate spending for the state as a whole and for groups of residents.

This model dataset was calibrated to exogenous measures for the state. We used a proprietary population growth model to move the ACS person weights over time and calibrated the resulting total to projections made by the Texas Comptroller;[79] the two projected population counts were less than half a percentage point apart through calendar year 2040. The race, family, insurance, and work characteristics of each respondent were retained into the future so that the change in these aggregate measures over time is solely the result of changes in population.

Health spending was calibrated to match CMS estimates of Texas personal health expenditures. Ratios of per-capita spending for Texas and the United States were applied to projected US personal health care

expenditures to derive out year Texas figures.

For the purposes of this exercise, it is important to note that the ACS measures health insurance coverage at a point in time (that particular point varying depending upon when the respondent is interviewed). Point-in-time measures of uninsurance differ from full-year uninsurance or part-year uninsurance (ever-uninsured). The 2016 MEPS gives a sense of the relative magnitudes of these measures at the national level. The measure we use in this analysis depends upon the type of cost we are calculating and the data on which our calculations are based.

MEPS Measures of Uninsurance, 2016

Population	323,142
Ever uninsured	53,819
Uninsured in July	34,638
Uninsured all year	24,609
Uninsured less than all year	29,211

NOTE: Uninsured in July is an example of point-in-time measurement. The figure includes full-year uninsured plus some of the part-year uninsured

As noted in our review of the literature, people who lack health insurance incur substantially more unsubsidized, uncompensated care than do those with health insurance. Our estimate for the effect in Texas starts with the 2014 report from Coughlin et al at the Kaiser Family Foundation.[80] They estimate that uninsured people (a weighted average of full-year and part-year uninsured) incur an implicitly subsidized amount of care equal to $653 per person (Table 1 of their report).[81] The authors derive an estimate of this implicitly subsidized care by comparing "the level of payment providers would have expected, on average, from the uninsured if they had had insurance to what they actually received from the uninsured."[82] Note that this figure excludes any actual payments received on behalf of the uninsured from public or private sources.

Coughlin et al also estimate that 60 percent of "uncompensated care" is hospital-based, and another 14 percent is provided by office-based physicians. This "uncompensated care" is broader in scope than the "unsubsidized care" of the previous paragraph; it includes programs such as VA and workers compensation, private grants, and so on. Intuitively, one might think that the split of unsubsidized care between hospitals and physicians is closer to 50:50, simply because grants are more often made to hospitals than to practitioners. However, for the purpose of our extrapolation we have used a 60:40 split (the remainder of uncompensated care is provided in public clinics, etc.).

We used the CMS Personal Health Care Expenditures estimates for the US and for states to move the Coughlin et al figures from a US base in 2013 to a Texas base for 2016, 2030, 2035, and 2040. Note that these estimates are lower than traditional expressions of "uncompensated care" to the extent that they exclude money received from nonpatient sources of revenue.

	US 2013	TX 2016	TX 2030	TX 2035	TX 2040
PHCE hospital per capita (extrapolater)	$2,966	$2,954	$5,580	$6,873	$8,334
PHCE physician per capita (extrapolater)	$1,801	$1,856	$3,372	$4,128	$4,999
Unsubsidized, ever-uninsured (Coughlin et al)	$653				
Hospital split 60%	$392	$390	$737	$908	$1,101
Physician split 14%	$91	$94	$171	$210	$254
Hospital and physician unsubsidized care per capita		**$484**	**$908**	**$1,117**	**$1,355**
Point-in-time uninsured, TX		4,795	5,583	5,830	6,105
Adjusted to ever-uninsured		7,193	8,375	8,745	9,158
Estimated unsubsidized care ($m)		**$3,481.4**	**$7,604.5**	**$9,768.2**	**$12,409.1**

There is little systematic information on the magnitude of a causal relationship between lack of health insurance and workplace effects. Lack of insurance is associated with poorer health, and poorer health is associated with more absenteeism and presenteeism. But causal directions are difficult to establish: is a lack of insurance caused by poor health, or is poor health caused by lack of insurance, or both? The answer is critical to an estimation of the effects of providing more insurance.

Similarly, there is no research into the effects of lack of insurance among family members on workforce participation by insured workers. Some evidence suggests that at any given point in time, uninsured people may work more hours than their insured counterparts — probably as a way to generate income to pay for medical care. There have been suggestions in economic literature that acquisition of insurance other than employer-sponsored insurance could lead to reductions in labor force participation among people whose principal reason for work is to cover medical costs.

As a result of this uncertainty, we have not estimated workplace losses attributable to lack of insurance. With more resources, we could conduct original research into such an estimate, but the nature of most existing surveys would make causal inferences very difficult.

According to Comola: "there are several options that Texas could consider to address uninsurance. For example, the state could coordinate with the federal government to 'amend and extend' the 1115 waiver in order to provide coverage to Texas living below the Federal Poverty Limit. Alternatively, the state could adopt Tex-CARE (Texas Community Access and Reform Engagement), Tex-CARE uses waiver funding to provide managed health care coverage within a system of care for uninsured Texans through participating community-based Local Healthcare Partnerships. No doubt there are other options and any of these scenarios could go far in mitigating the impacts of uninsurance to the state's economy now and in the future, as well as to Texas employers; state and local governments; individuals and families; and hospitals and physicians.

Providing more access to insurance coverage may incur additional healthcare costs — potentially reducing the net economic benefits of insurance. However, there are ways to do so in a way that limits such additional costs, and the growing burden means that it is increasingly important to find ways to do so."

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Wye River Group

Wye River Group is a nonpartisan, not for profit entity, which serves as catalyst to raise awareness and broaden perspectives to enable cross stakeholder engagement. The organization tackles challenging public policy issues such as water and health and health care.

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Actuarial Research Corporation (ARC) is a veteran-owned small business that was originally founded to support government analysis of health care and other benefits. We are continuing and expanding that mission today, analyzing health insurance coverage, quality, and costs of national programs. ARC has established an international reputation over the course of 40 years for reliable provision of expert advice that is rigorous, high quality, and timely. Using actuarial methods and innovative data analysis, our work provides advanced insights into the rapid evolution of health care financing and insurance. We are a unique organization encompassing actuarial, statistical, data analysis, economic and health research activities with staff members who are recognized experts in their fields. Our employees' unswerving focus on providing high quality, unbiased analysis and research has enabled us to consistently maintain the highest standards for our trusted partners and clients.

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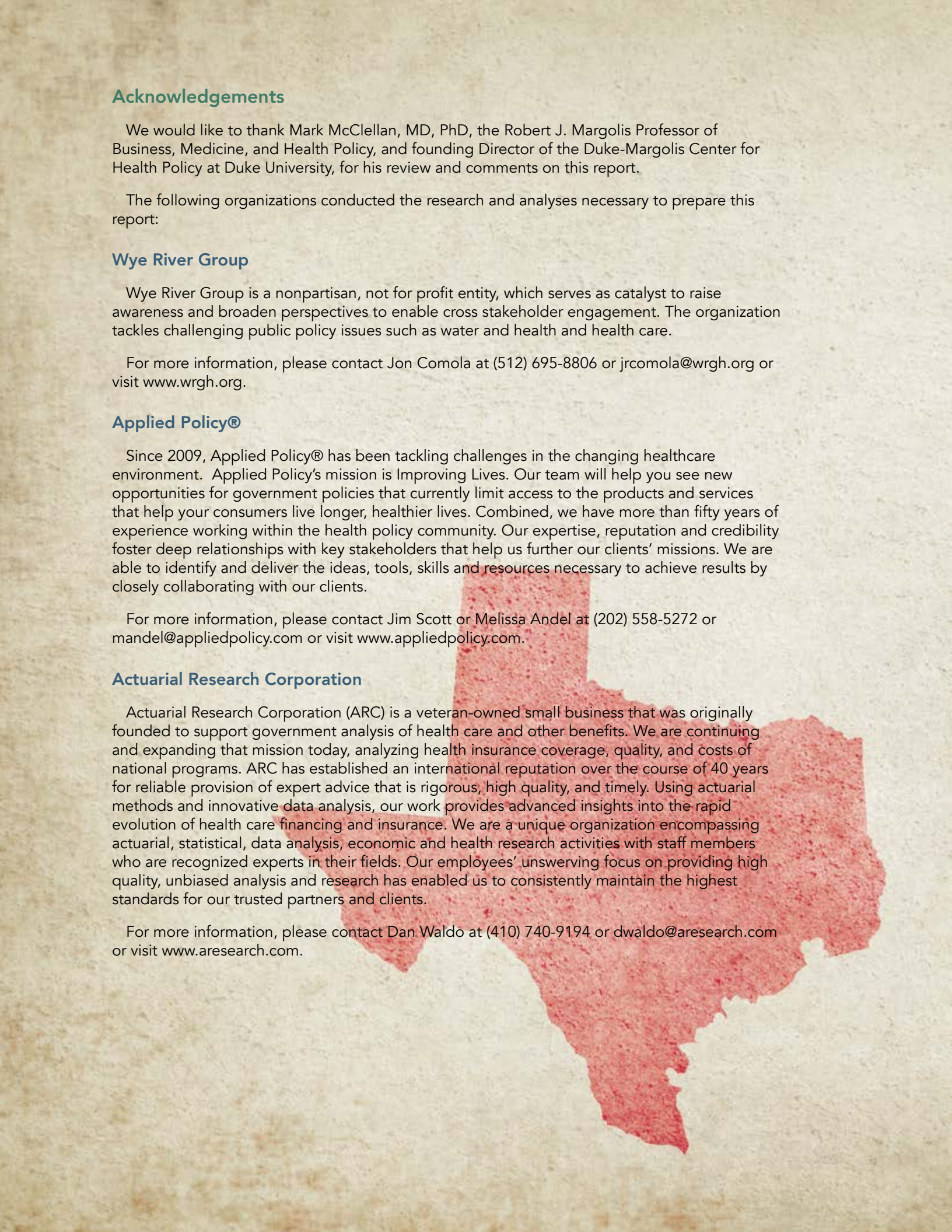

We estimate that by 2040, Texas health care providers could face as much as $12.4 billion in unsubsidized uncompensated care if current uninsurance rates continue.