



CENTRAL HEALTH CONNECTION
LEADER DIALOGUE SERIES 2011–2012:

Health and Health Care Trends
& Innovations in Central Texas

OCTOBER 2011

Dear Community Leaders:

Your leadership and commitment are critical to addressing one of the most pressing and complex issues for Central Texas. Improving the health care system and the health of individuals in the region is essential to supporting the vitality and sustainability of our region. This is a substantial task and requires every person to participate in multiple ways — as individuals, as heads of organizations, as business owners, as policymakers. Your active participation can help set the course to envisioning and achieving a more effective and cost effective health care system and a healthier populace. This will save shrinking resources and ensure that we have the workforce necessary to support a thriving economy. Your involvement in this process shows the importance of investing in the future success and health of everyone who lives and works in Central Texas.

Unsustainable increases in health care costs are draining businesses and families. Declining health is a drag on economic productivity. Earlier onset of many chronic diseases is exponentially increasing the costs of health care. For the first time, it is anticipated that this generation will have a shorter life span than its parents. We can reverse these trends in Central Texas by taking action to address these issues together.

With leaders across the region, we seek to develop a collaborative vision and action plan to achieve the health and economic outcomes we all desire for Central Texas.

Why now?

In Texas, we spend \$4,601 per capita on health care, up 36.1% from 2005 to 2009. This increase is almost four times the rate of inflation and more than four times the rate of population growth.¹ Additionally, 75% of national health care spending is due to chronic and often preventable diseases such as diabetes and heart disease which are a much higher risk among obese populations. The obesity epidemic continues to grow, with nearly two-thirds (67%) of adults in Texas overweight or obese.² *We have the ability to change our future.*

Why this initiative?

Multiple national studies show that health and health care have a direct and indirect impact on business, education and job growth. The U.S. economy loses \$260 billion per year in lost economic output due to workers' ill health.³ *To begin reversing the health crisis today, it is imperative that we form a comprehensive approach across Central Texas (Travis, Bastrop, Caldwell, Hays and Williamson Counties).*

Where do you fit in?

Every person in Central Texas has a role to play in this effort and must invest in the long term future of Central Texas — there is not a quick fix. Each and every one of us can take steps to improve our personal health and set an example for those around us. Leaders of organizations and businesses can change company culture and policy to support employee health and productivity. Health care leaders can innovate and change how they do business. Community leaders can call attention to the need for improvements and changes in policies. Policymakers can listen and change public policy to support improved health outcomes for the communities they influence — school districts, municipalities, counties, regional planning bodies.

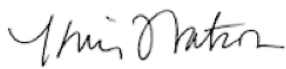
Where should you begin?

Please begin by reading this White Paper which provides a snapshot of where Central Texas stands on health and health care. This information will put us on the same page about the facts. As you read, identify where you fit in the picture of what is happening in Central Texas and begin to think of ways you can take steps to address the issue of health and health care in Central Texas. Find a reason to be inspired to address this issue — do you want a brighter future for your child, your company, your community? Consider the legacy you leave behind — it can make all the difference.

The underlying issues driving the health and wellness of our community are complex and cannot be addressed in isolation. Please join us on our mission to improve the health and vitality of all of Central Texas.

Thank you in advance for investing in our community.

Sincerely—



Kirk Watson
Texas State Senator



Andy Martinez
Greater Austin
Hispanic Chamber of Commerce



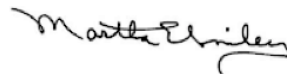
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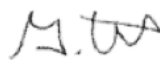
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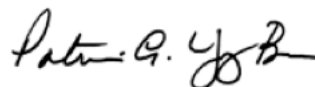
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Why Care About Health and Health Care?

Investing in Health and Health Care will Strengthen the Economy of Central Texas

Central Texas is growing faster than the systems needed to support a healthy, diverse and prosperous community. Our future economic growth depends on improving the region’s health and health care system.

THIS REPORT DISCUSSES:

- The way in which employment, education, transportation and the environment affect health which in turn affect economic growth in the region.
- The challenges related to access, quality and cost of health care and the inefficiencies in our current system.
- How interconnected efforts among these sectors will help facilitate and accelerate improvements across the region.
- Innovative solutions under way in Texas and around the country.

Five key trends are influencing the health of Central Texas residents:

1. The workforce and population demographics are changing and growing more diverse.

The population in Central Texas is growing at a rate (28%) that is nearly four times faster than the national average.

- *Significant shifts in age distribution and racial/ethnic composition are projected.* This expansion will alter the population’s health care needs, workforce composition and consumer tendencies.
- *Our health care and business sectors as well as other sectors need to be prepared to respond to this transformation.*

2. The rise in chronic disease and health disparities is reducing worker productivity.

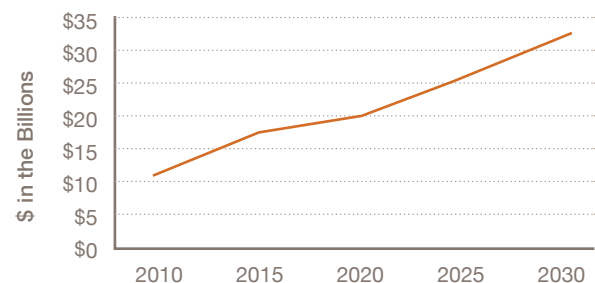
High rates of chronic disease in the region have significant economic costs. Health status is influenced by several underlying factors such as behavior, social and economic status, work status and physical environment. These factors also significantly affect the rising costs of our health care system.

- *Most health conditions that reduce workforce productivity are preventable or controllable.*

For example, two-thirds (67%) of adults and 32% of children in Texas are either overweight or obese.

- *The total cost of obesity alone to Texas businesses was \$9.5 billion in 2009.⁴ By the year 2030, rising obesity rates in Texas are projected to triple the costs of care to a total of \$32.5 billion (Figure 1).*

FIGURE 1. RISING HEALTH CARE COSTS DUE TO OBESITY IN TEXAS



Health: The overall wellness of a population as measured by quality of life.

Health Care: The system responsible for providing and paying for the clinical and social services necessary to treat disease and promote wellness.

3. Community infrastructure and resources are critical to health and lagging behind regional growth.

The population of Central Texas is growing faster than the infrastructure needed to support a healthy and thriving region. This has a direct impact on the region's economy; many businesses decide where to locate based on these factors. Many residents contend with:

- *Inadequate transportation:* A gap remains in east-west public transportation; the lack of robust transportation infrastructure for the rural parts of Travis and the outlying counties limits residents in their access to employment opportunities, health care facilities and healthy lifestyle options.⁵
- *Lack of access to healthy foods and safe recreational facilities:* Only 40% of zip codes in Caldwell County and 50% of zip codes in Bastrop County have a healthy food outlet, compared to 62% of zip codes in Texas. A similar trend is seen in access to recreational facilities.
- *Insufficient educational opportunities:* Three of Central Texas' counties (Bastrop, Caldwell, and Travis) have lower high school graduation rates than the national average, a concern since education level has a direct connection to health outcomes.⁶

4. Access to health insurance and quality, affordable health care is insufficient.

In Central Texas, health care spending rose 138% between 1999 and 2010, while wages increased only 42%.⁷ Despite this spending, nearly 28% of residents lack health insurance compared to 17% nationwide.

- *Working Texans are more likely to be uninsured than Americans overall,* with 67% of uninsured Texans being employed compared to 58% nationally. Small businesses, in particular, face challenges in offering insurance to employees due to cost, yet reductions in insurance coverage can increase the risk of disease and lead to rising health care costs for everyone.

- *People experience barriers to accessing care.* Hospitals are not compensated for many uninsured patients and thus must raise costs on the insured to cover their expenses.

Texas ranked 49th out of 50 states on state health system performance, failing to address essential indicators such as access, quality and ensuring all populations benefit from health care.⁸

5. Provider shortages and misaligned incentives are hindering access to care resulting in inefficient health care spending.

Even though health care is one of the largest industry employers in Central Texas, all five counties in the region have some designation as a medically underserved area.

- *Provider shortages:* It is estimated that 600 new physicians were needed in 2010 to address the gap between supply and demand. This gap is projected to increase to nearly 3,000 physicians by 2020.⁹
 - + Austin is the only metropolitan city of its size without a medical school. Medical schools supply many growing communities with a continuous stream of physicians who often choose to practice where they trained.
- *Misaligned incentives:* Our health care system was built on treating the sick rather than promoting health and preventing illness, where providers are compensated for services rendered rather than for successful health outcomes. This approach rewards providers for ordering more diagnostic tests and procedures rather than for preventing or managing disease, resulting in higher costs.
- *Health care waste:* Almost one third of total spending on health care is considered wasteful, meaning this care could be eliminated without reducing health care quality (Table 1).^{10, 11}

TABLE 1. ESTIMATED ANNUAL HEALTH CARE SYSTEM WASTE IN THE U.S.

Leading Causes of Health Care Waste	Factors Involved in Health Care Waste	Annual Cost (\$)
Lack of Care Coordination	Duplicate tests, emergency room use instead of primary care, etc.	\$25–50 billion
Unwarranted Use	Care that provides no marginal value	\$250–325 billion
Preventable Conditions	Preventable illness	\$25–50 billion

Forging a Path to Health

By applying best practices from a national perspective and learning from what is happening in our own communities, we can advance the region as a national model for health and health care and build a healthier community. Influencing health requires a multidimensional approach that includes aligning lifestyle choices and options, business practices, community norms and health policies.

These five tenets lay the foundation for our community leaders to champion and build upon innovative strategies to strengthen our region:

1. Health insurance coverage improves employee health, productivity, satisfaction and retention.

Uninsured, working-age Americans have a 40% higher risk of death than their privately insured counterparts.¹² As health insurance coverage increases, Americans are more likely to get screenings and less likely to incur unnecessary spending and receive substandard care.

- *Investment in employee health can reduce sick leave absenteeism by 28% on average, health care costs by 26%, and workers' compensation and disability management claims by 30%, as well as improve employees' productivity and satisfaction at work.*¹³
- *Purchasing coalitions, a strategy used by many employers, helps businesses reduce the cost of health insurance by providing the purchasing clout and a more favorable risk profile to negotiate lower premiums.*

2. Disease prevention and health promotion are less expensive and more effective than treating illness.

While 75% of national health care spending is due to chronic and preventable disease,¹⁴ only four cents of every dollar is spent on prevention and public health.

- *The return on investment in health care is substantial: \$5.60 is saved for every \$1 spent on prevention. Implementing proven programs and policies related to increasing physical activity, improving nutrition and preventing tobacco use could save the country more than \$16 billion annually within five years, \$1 billion just in Texas.*¹⁵

- *Innovative interventions in worksites, schools and the community have the added benefit of positively influencing health and overall quality of life, and results can be achieved in 12-18 months. Across the country, businesses small and large are rewarding employees that enroll in wellness initiatives and achieve healthy goals.*

Employer-sponsored programs that reduce risk status save up to \$53 per employee for every year that the employee remains in a low-risk group.

3. A community with more robust health infrastructure will attract a more educated and entrepreneurial workforce.

Changes made at both individual and societal levels successfully stimulate the economy. Economic redevelopment and revitalization policies can improve proximity of healthy lifestyle options near work, home and schools to attract a high quality workforce, thriving businesses and support healthy behaviors that lead to improved health. Expanding professional medical education and training opportunities will:

- *Increase the number and quality of health care providers choosing to practice in Central Texas.*
- *Attract businesses with high wage jobs that require a more educated workforce and foster additional economic development.*

4. Aligning incentives, access and health care delivery makes the health care system more efficient and results in better quality and outcomes.

Primary care is the lynchpin for coordinating care and managing disease. Regions with more primary care practitioners tend to deliver more effective, high quality care and have lower spending.¹⁶ Expanding access to preventive, primary care and specialty providers (particularly mental and dental health care) decreases unnecessary emergency room visits, reduces costs and improves outcomes. Some state and regional initiatives to address these issues include:

- *Medicaid reform:* Texas is currently fast-tracking Medicaid reform to expand coverage to its uninsured population.
- *New reimbursement models:* Accountable Care Organizations, where providers share the responsibility for improving care efficiently under one budget and are rewarded for achieving outcomes, are helping to coordinate care between primary care providers, specialists, and hospitals to improve service and manage costs.
- *Innovative technology:* Many health care providers are integrating innovative technology such as electronic medical records to increase efficiencies for making better decisions about care.

5. Developing multi-sector partnerships can improve our health and economic sustainability.

Improving the health care system and the overall health of our population and workforce will require a coordinated and collaborative approach. Successful

Strengthening investment in medical education and biotechnology – and its ripple effect in investment in the local economy – is estimated to yield approximately \$2 billion in annual economic activity and nearly 15,000 permanent jobs to the area.¹⁷

and sustainable initiatives span individual, family, workplace, community and public policy approaches.

- *Multi-sector partnerships are leveraging their resources, numbers, diversity and relationships* across the country to develop and implement effective strategies to improve quality of life. Current health care challenges present an opportunity to create innovative solutions through collaboration.
- *By working together, we have the ability to ensure that Central Texas continues to be a healthy, productive community;* a “first in class” destination; and an example for the nation.

Next Steps

We need to break the cycle of cost, coverage, and illness by aligning health policies, infrastructure development and incentives to improve overall health, as shown in the figure below. Ensuring strong infrastructure and supportive policies can strengthen the environment to bring about large-scale change to improve the region’s overall health and economic prosperity. **These efforts will lead to achieving a vision of healthy people, healthy economy and healthy community.**





WHY CARE ABOUT HEALTH AND HEALTH CARE?

Health: *The overall wellness of a population as measured by quality of life.*

Health Care: *The system responsible for providing and paying for the clinical and social services necessary to treat disease and promote wellness.*

Overview

Improving health in the region is critical for our future and doing so means much more than good health care; health also depends on education, economics, the environment and other underlying factors. A review of national and local research and over 40 interviews with local leaders from diverse business and community interests informed this report which reflects on the important challenges and opportunities to improve the region's health, and consequently, our future economic development.

The following discussion is grounded in the notion that programs and policies can have an impact on a variety of health factors, which in turn can lead to improved health outcomes for a population. Specifically, these policies and programs can be focused on individuals, organizations, or entire communities. The health factors influenced by these programs and policies can also cover a variety of areas — from lifestyle behaviors (e.g., diet and exercise) to clinical care (e.g., access to medical services) to social and economic factors (e.g., employment opportunities) to the physical environment (e.g., air quality). Guided by this framework, the first section of this report discusses the trends and challenges related to these health factors and outcomes. The subsequent section highlights innovative programs and policies that are improving health outcomes and how they can guide our next steps in Central Texas.

“Of the many ways to improve health, only one of them is through the medical system.”

EDUARDO SANCHEZ, MD, MPH

Vice President and Chief Medical Officer, Blue Cross Blue Shield of Texas and Former Commissioner, Texas Department of State Health Services

Why Care About Health and Health Care?

The health of our region is at risk and we need your help. You, along with every person who works or lives in Central Texas (Bastrop, Caldwell, Hays, Travis, and Williamson Counties), have the potential to affect not only our region's health and quality of life, but also our economic future. Employment status, education, environment, disease prevention and access to health and social services are important influences on our health and our local economy; by coordinating our efforts, each one of us has the capacity to make an impact. Central Texans can be proud of all that our region has to offer, and our investment in health and health care will strengthen our distinction as a great place to work and live.

Central Texas is changing. We must proactively address the direct and underlying factors that will create a healthier workforce, control health care spending, improve quality of life and sustain future economic growth.

By measurably improving health and health care, we can and will make a difference for the future prosperity of Central Texas. This report outlines the health and fiscal challenges our communities face and highlight innovative solutions under way in Texas and around the country. Looking at interconnected efforts among employment, education, transportation, environment and health will help facilitate and accelerate improvements across the region.

Five key trends are influencing the health of Central Texas residents:

1. The workforce and population demographics are changing and growing more diverse.
2. The rise in chronic disease and health disparities is reducing productivity.
3. Community resources to promote health are lagging behind regional growth.
4. Access to health insurance and quality, affordable health care is insufficient.
5. Provider shortages and misaligned incentives are hindering access to care resulting in inefficient health care spending.

“Specific challenges facing Central Texas include changing demographics, high birthrates, limited education, unhealthy behaviors, lack of insurance, health workforce shortages, and excessively high health care prices. Everyone will want to point fingers at others. It is true that no single stakeholder group is solely to blame, but each needs to acknowledge some responsibility.”

WILLIAM SAGE, JD, MD

Vice Provost for Health Affairs, University of Texas at Austin



1. Workforce and population demographics are changing and growing more diverse.

The population in Central Texas is growing at a rate nearly four times faster than the national average.

Currently the 35th largest metropolitan area in the U.S., Central Texas (Bastrop, Caldwell, Hays, Travis and Williamson counties) is expected to increase by 1 million people-up to a total of 2.3 million residents by 2020.

“Our region is growing to become more global and diverse in its employment base.”

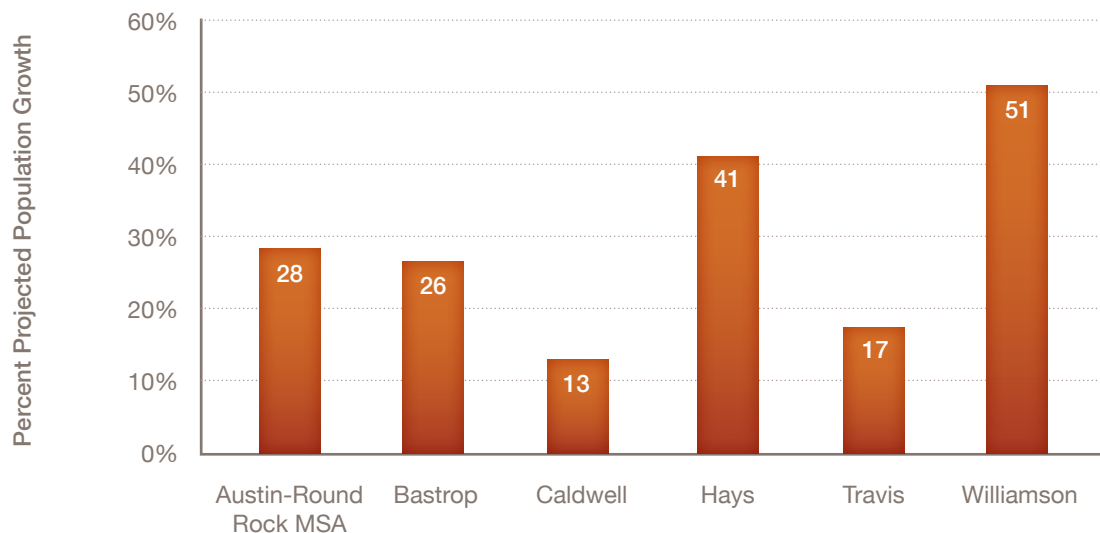
REVEREND JOSEPH PARKER, JR. JD, DMIN

David Chapel Missionary Baptist Church

Although Austin/Travis County remains the region's hub, growth is shifting to the surrounding counties, most notably to Williamson and Hays counties.

While the population in the Austin-Round Rock area is expected to grow by 28% over the next 10 years, the populations in Hays and Williamson Counties are projected to increase by 41% and 51% respectively over the same time period (see Figure 2). Furthermore, nearly 80% of employed residents in the area work in the five-county region, yet the majority of residents from Bastrop, Caldwell, Hays, and Williamson Counties work in a different county in the region from the one in which they reside, underscoring the critical need for a regional approach to improving health and health care. Additionally, the projected increase in population has a significant impact on other areas including growing demand on health care and social services, availability of skilled workers to meet the needs of growing industries, and mounting stress on existing infrastructure.

FIGURE 2. PROJECTED POPULATION GROWTH, CENTRAL TEXAS, 2010–2020

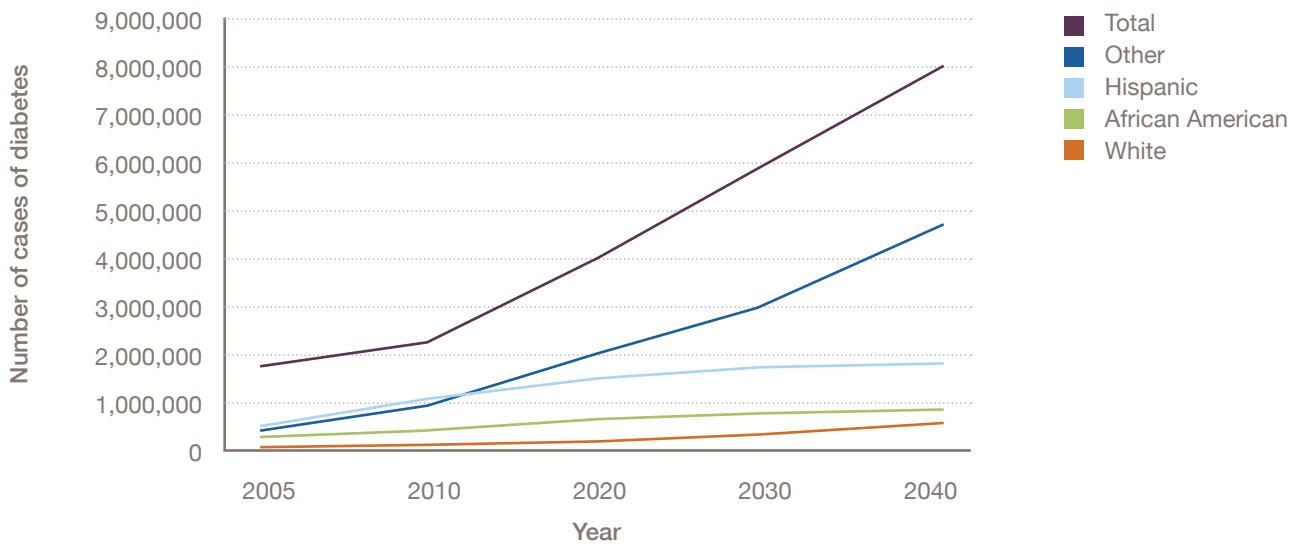


Source: Workforce Solutions. (2010). *State of the Workforce: Austin-Round Rock Metropolitan Statistical Area (MSA)*.

Note: The Austin-Round Rock MSA is comprised of Bastrop, Caldwell, Hays, Travis and Williamson counties.



FIGURE 3. ACTUAL AND PROJECTED TRENDS OF TEXANS WITH DIABETES, 2005–2040



Source: Office of the State Demographer, Texas Health Institute, Methodist Healthcare Ministries. (2010). *Summary Report on Diabetes Projections in Texas, 2007–2040*.

The region’s population is also growing more diverse.

Two significant shifts in demographics – age and racial/ethnic diversity – could disproportionately affect future education, employment, health status and productivity of Central Texas. The region currently has a young population (median age 32.6 years). However, Central Texas is aging as more retirees relocate to the area and more people reach retirement age. Aging populations experience more chronic conditions and other health related issues and consume a larger portion of health care resources. At the same time, by 2020, an estimated 70% of the population in Central Texas will consist of racially or ethnically diverse residents, compared to 44% currently.¹⁸ Hispanics are expected to comprise 42% of the region’s population in 2020, a growth from 32%. Hispanic populations typically bear a greater burden of preventable and chronic diseases such as diabetes, which is projected to increase exponentially in Texas over the next 30 years (see Figure 3). Without early intervention, these demographic trends could have a negative impact on the overall health status of the region and the need for health care resources.

The recent recession caused a significant drop in per capita income.

The region lost 20,000 jobs last year, reaching an unemployment rate of 7.3% in 2011. Some industry sectors such as technology and health care are still growing and require more educated and skilled career professionals who tend to earn higher wages. However, the restaurant and service industries are also growing and tend to hire lower wage positions which typically do not provide health care. This has implications for health because lower income individuals, often with inadequate health care coverage, are more likely to suffer from greater health risks.

2. The rise in chronic disease and health disparities is reducing productivity.

Most health conditions affecting our workforce are preventable or controllable.

Addressing factors that can decrease one's risks for chronic illness (such as eating healthy, being active and controlling weight) will improve health, decrease costs and improve productivity. The top causes of death for all counties in Central Texas and the most prominent risk behaviors affecting these conditions are summarized in Figure 4.¹⁹

Central Texas is healthier in terms of chronic disease risk factors than Texas overall; however, its rates still mirror those seen across the country in conditions such as obesity, high cholesterol and high blood pressure (see Table 2). These factors not only have a significant impact on people's quality of life and risk of premature death, but also the rising costs of our health care system.

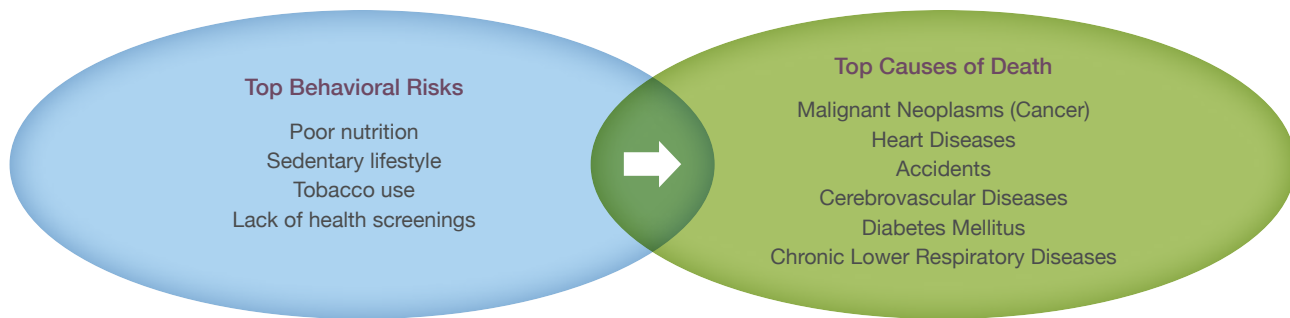
“Heart disease, cancer, diabetes and other long-term health problems increase health care costs and decrease productivity, eroding the bottom line of American businesses.”

THOMAS FRIEDEN, MD, MPH

Director, Centers for Disease Control and Prevention

According to the World Health Organization, if we eliminated the risk factors that cause chronic disease, at least 80% of heart disease, stroke and diabetes cases and 40% of cancers could be prevented.²⁰

FIGURE 4. TOP RISK FACTORS IN CENTRAL TEXAS AND LEADING CAUSES OF DEATH



Source: Texas Department of State Health Services. (2010). *Deaths of Texas residents, 2008.*

TABLE 2. PERCENTAGE OF ADULTS WITH SPECIFIC CHRONIC DISEASE RISK FACTORS, 2009

	Austin Round-Rock MSA*	Texas	U.S.
% overweight or obese	61.2%	66.8%	63.1%
% diagnosed with high cholesterol	37.9%	40.9%	37.5%
% diagnosed with high blood pressure	27.8%	29.1%	28.7%
% current smokers	14.2%	17.9%	17.9%
% diagnosed with current asthma	7.3%	6.5%	8.8%
% diagnosed with diabetes	5.8%	9.3%	8.3%

Source: Centers for Disease Control and Prevention. (2009). *Behavioral Risk Factor Surveillance System (BRFSS).*

*Austin Round-Rock Metropolitan Statistical Area includes residents from the five-county area.



Medical care alone cannot adequately improve overall health or reduce disparities that exist in our communities.

Health status is influenced by factors such as behavior, social and economic status, work status and physical environment. Central Texas has some of the healthiest counties in Texas, yet health status and prevalence of chronic diseases vary widely across and within the five-county area.²¹ While two of the top ten healthiest counties in Texas are found in Central Texas, some of the region’s counties lag significantly behind the nation in several major predictors of health. For example, among the 233 counties across the state of Texas, Williamson County was ranked second in clinical care and fifth in health behaviors, yet it was 163rd for physical environment. However, Bastrop County was ranked 92nd in clinical care, 220th in health behaviors and 101st for physical environment.²²

“As people and businesses relocate to the area, we need a healthy workforce. We need an educated workforce. We need a strong transportation system. We need a health care system that supports a healthy workforce.”

SHANNON JONES, MPA

Deputy Director, Austin/Travis County Health and Human Services

Among all chronic conditions, obesity has become one of the most dangerous health epidemics in the region, contributing to increased costs, poor health and decreased productivity.

Nearly two-thirds (67%) of adults and 32% of children in Texas are either overweight or obese. One of the compounding effects of obesity is that it frequently co-occurs with or exacerbates other chronic conditions such as diabetes and high blood pressure. In 2009 alone, the total cost of obesity to Texas businesses was \$9.5 billion.²³ The majority of these costs were due to lost workforce productivity, while less than half were due to direct medical care (see Table 3).

“Smoking is bad, but obesity is really the issue – that’s where the costs are. If we could reduce that number, that’s the one. If you reduce weight, that weight loss would have the greatest impact on their health and our costs and where we can improve productivity.”

MARK FINGER

Vice President of Human Resources, National Instruments²⁴

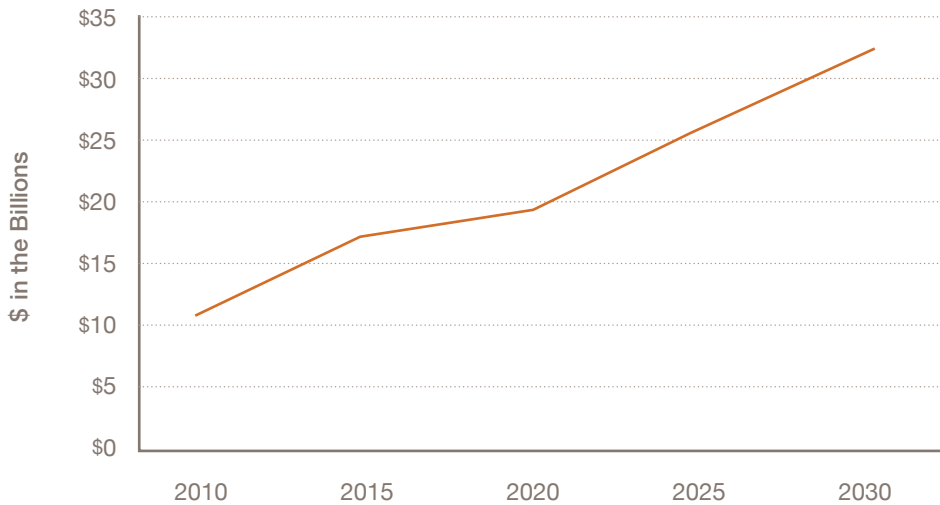
TABLE 3. ECONOMIC COSTS OF OBESITY TO BUSINESS IN TEXAS, 2009

Areas of Costs	Estimated Costs of Obesity	Percent of Total Costs
Healthcare	\$4.02 billion	42.5%
Presenteeism*	\$3.47 billion	36.7%
Absenteeism	\$1.64 billion	17.4%
Disability	\$0.32 billion	3.4%
Total Direct Costs	\$9.45 billion	100%

* Lost productivity while at work

Source: Combs, S. (2011). *Gaining Costs, Losing Time: The Obesity Crisis in TX*. Texas Comptroller of Public Accounts.

FIGURE 5. RISING HEALTH CARE COSTS DUE TO OBESITY IN TEXAS



Source: Combs, S. (2011). *Gaining Costs, Losing Time: The Obesity Crisis in TX*. Texas Comptroller of Public Accounts.

By the year 2030, rising obesity rates in Texas are projected to triple the costs of care to a total of \$32.5 billion (Figure 5).²⁵

Employer's health costs are affected not only by adult workers, but by their dependents. Children and adolescents are responsible for 14.7% of a typical large employer's health care costs.²⁶ Compared to children with a normal body mass index (BMI), obese children are three times more likely to be hospitalized and use more physician services.²⁷ Obese children are likely to become obese adults, have high blood pressure and high cholesterol (risk factors for cardiovascular disease), and are at higher risk for Type 2 diabetes and breathing problems such as asthma.²⁸ They are also more likely to miss days of school, increasing parental days missed or time off from work and reducing their own potential economic success later in life.²⁹

“Vibrant economies are highly correlated to the availability of a healthy workforce. Lack of such human capital can result in a reduction in financial and productivity performance levels for businesses through higher insurance premiums and increased use of sick days. Further, studies show that children with less healthy eating and living conditions often find difficulty with focus during school directly effecting educational attainment and the quality of future talent pipelines for cities and corporations.”

NATALIE MADEIRA COFIELD

President and CEO, Capital City African American Chamber of Commerce



3. Community infrastructure and resources are critical to health and lagging behind regional growth.

The population of Central Texas is growing faster than the infrastructure needed to support a healthy and thriving region.

Diet, nutrition and exercise are critical factors contributing to the obesity epidemic and increased chronic diseases such as diabetes, heart disease and stroke.^{30,31} While individual choices in these areas are important, having a health-promoting environment and providing high quality, accessible services across the region are critical in supporting healthy lifestyles among all residents.

“We have patients going to Travis County for care. We need to concentrate on getting access to health care services in this area. We are looking to create a one stop shop – a hub – for health services.”

NICOLE BOWER

Health Care Committee, Opportunity Bastrop County

Given the significant population growth and changing demographics, the region needs to focus on the essential infrastructure to support residents, businesses and health services in all five counties. The level of community resources and infrastructure also has a direct impact on the region’s economy; many businesses make decisions about where to locate based on these factors. In addition to ensuring residents are able to access affordable, quality health care, residents need:

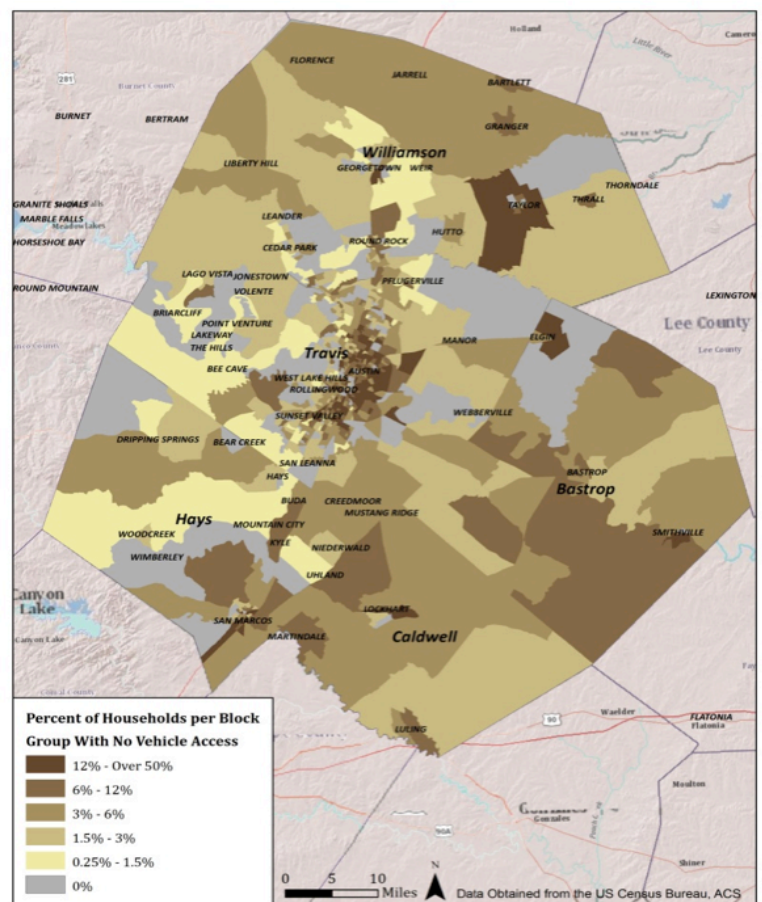
- Adequate transportation
- Access to healthy foods
- Safe accessible green spaces and recreational facilities
- Educational opportunities
- Affordable, safe, quality housing

While the relationship between these community-level factors and health is complex and deeply-rooted, this section highlights some of the significant concerns regarding the physical and social service environment in Central Texas that influence health.

Transportation options are inadequate for residents across the region to easily access healthy lifestyle resources.

As illustrated in Figure 6, in some areas east of Austin and in outlying counties, at least one in eight households has no access to a car.³² These residents must rely on public transportation, which can be limited, to get to and from work, go to the grocery store, and visit the doctor. Additionally, for those who do rely on cars for transportation, long commute times significantly reduce the opportunity to be physically active.

FIGURE 6. CAR OWNERSHIP IN CENTRAL TEXAS



Source: U.S. Census Bureau. (2009). American Community Survey; Google Earth.

Access to public transportation has increased but is not always convenient or easily accessible for some residents. While the recent build-out of the commuter rail connects the northwestern suburbs of Austin to the city center, a gap remains in east-west public transportation in Austin; thus, some residents are unable to easily access employment opportunities, health care facilities and healthy lifestyle options. As a result, many residents within Travis County and across the region are, in effect, stranded by the lack of a robust transportation infrastructure.

Some residents have limited access to healthy and nutritious food options.

Fresh fruits and vegetables are not readily available to many living and working in Central Texas. For example, only 40% of zip codes in Caldwell County and 50% of zip codes in Bastrop County have a healthy food outlet, compared to 62% of zip codes in Texas and 55% nationally (see Table 4).

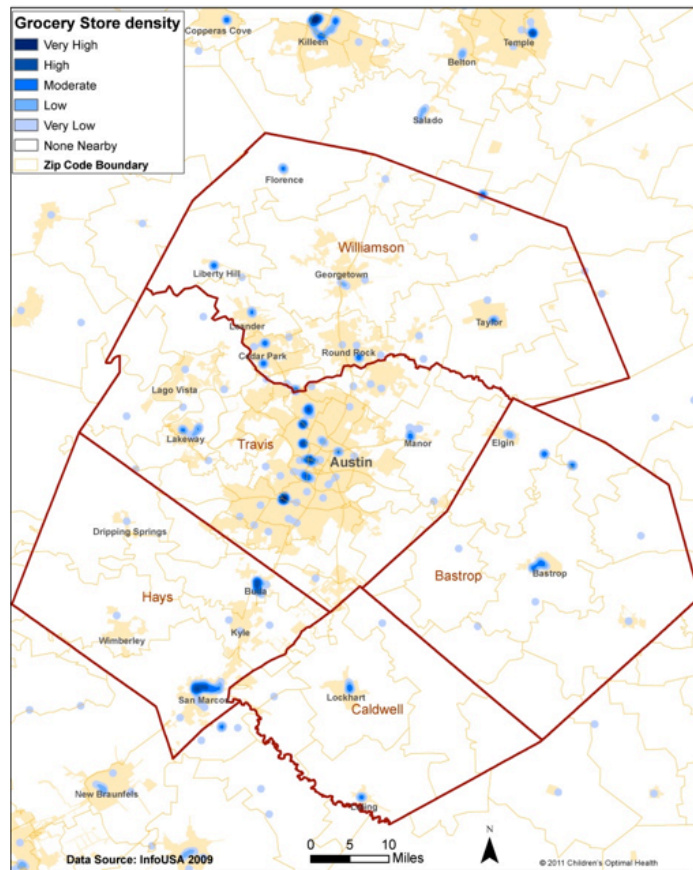
“Too many people in rural areas depend on family and friends for transportation to and from health and medical services which is too often not very reliable.”

SUE LONG

Coordinator, Opportunity Bastrop County

This is further demonstrated in Figure 7, which highlights the lack of available grocery stores in some parts of the region, particularly in Caldwell and Bastrop Counties. These “food deserts” result in residents having to travel long distances to buy food or rely on establishments such as convenience stores in their area which are limited in the healthy foods they offer.

FIGURE 7. GROCERY STORE DENSITY



Source: InfoUSA. (2009).

TABLE 4. ZIP CODES WITH HEALTHY FOOD OUTLETS, 2008

	Bastrop County	Caldwell County	Hays County	Travis County	Williamson County	Texas	U.S.
Percent of zip codes with a healthy food outlet* (e.g. grocery store or produce stand/farmer's market)	50%	40%	71%	78%	67%	62%	55%

* Healthy food outlet is a grocery store or produce stand/farmer's market
 Source: County Health Rankings. (2011). Texas. www.countyhealthrankings.org

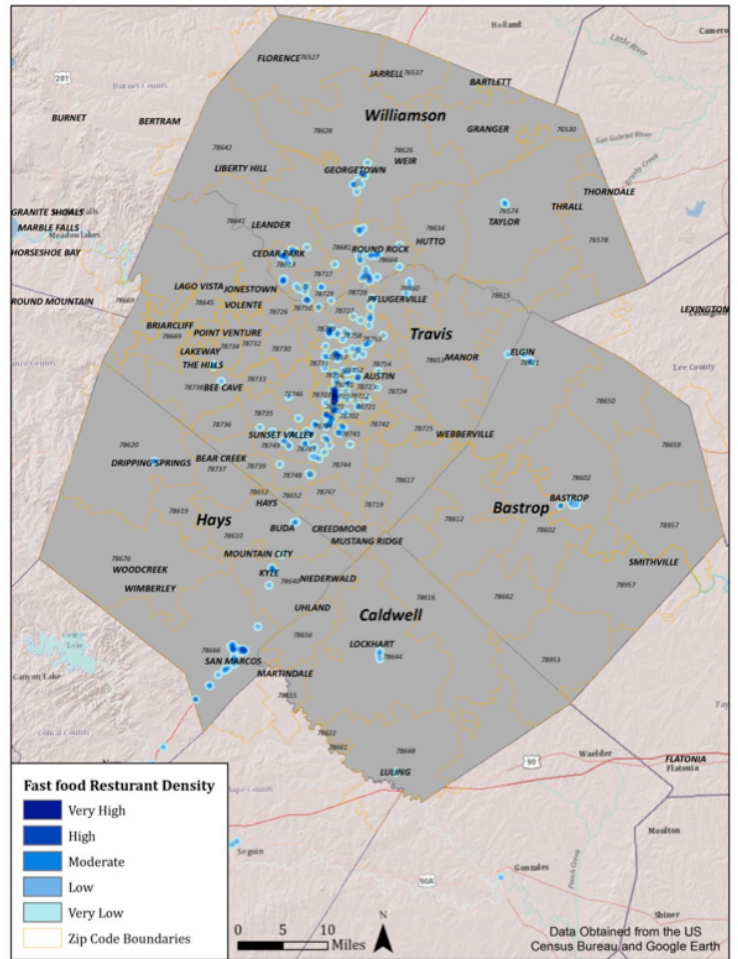
In many low income communities, grocery stores have been replaced by fast food outlets.

Figure 8 shows the concentration of fast food outlets in the region, most in the areas with the highest population density. As with the distribution of grocery stores, Bastrop and Caldwell Counties have lower concentrations of food-related establishments, even among fast food outlets.

Residents lack access to safe green spaces and recreational facilities.

Compared to the national average of 8 facilities for every 100,000 people, two of the counties in Central Texas—Bastrop and Caldwell Counties—have fewer recreational facilities available to the population density they serve (see Table 5). Hays and Williamson Counties fall close to the national average in their concentration of recreational facilities which offer opportunities for fitness and recreational sports to residents.

FIGURE 8. FAST FOOD OUTLET DENSITY



Source: U.S. Census; Google Earth.

TABLE 5. ZIP CODES WITH RECREATIONAL FACILITIES, 2008

	Bastrop County	Caldwell County	Hays County	Travis County	Williamson County	Texas	U.S.
Number of recreational facilities per 100,000 population*	4	5	10	12	9	7	8

* Recreational facilities are defined as primarily engaged in operating fitness, exercise, and recreational sports activities.

Source: County Health Rankings. (2011). Texas. www.countyhealthrankings.org

TABLE 6. HIGH SCHOOL GRADUATE RATES BY COUNTY, 2005–2006

	Bastrop County	Caldwell County	Hays County	Travis County	Williamson County	Texas	U.S.
% of high school students who graduate in four years	70%	65%	85%	70%	85%	72%	77%

Source: County Health Rankings. (2011). Texas. www.countyhealthrankings.org

More work is needed to ensure students receive adequate, quality education.

As seen in Table 6, three counties in Central Texas have lower high school graduation rates compared to the state (72%) and national rates (77%).³³ On average, less educated people are more likely to be unemployed, uninsured and have worse health outcomes than those with higher education levels;³⁴ thus, insufficient education can contribute to the poor health outlook in the region.

“There is no question that healthy kids can learn at high levels and that high school drop outs are a drain on the healthcare system. We must focus on a comprehensive effort to ensure every child has the potential to succeed in life through better education and better health.”

SUSAN DAWSON

Executive Director, E3 Alliance

Affordable, quality housing may not be available for some Central Texas residents.

Research has shown that availability of high quality affordable housing enables families to spend a greater share of household income on food, health care expenditures and other essentials that promote good health.³⁵ The physical structure of the home also has a direct impact on health conditions such as lead poisoning, asthma and allergies.³⁶ Like in many parts of the country, affordable rental housing can be in short supply in the area. Bastrop, Caldwell, and Hays Counties, in particular, have higher percentages of residents that are considered “moderately or severely cost burdened” by housing costs than residents statewide.



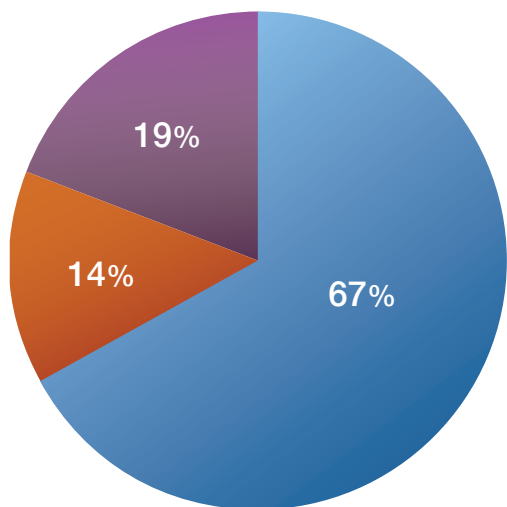
4. Access to health insurance and quality, affordable health care is insufficient.

Fewer employers are offering health insurance to their workers. Although nearly one-quarter of Central Texas residents are uninsured, the majority are employed.

This is a much larger figure than what is seen across the country (see Figure 9). In Texas, 67% of the uninsured population is employed, compared to 58% nationally. Nationally, Texas is the leader among the 50 states in rates of insured.³⁷ Lack of adequate health insurance is a predictor of poor health. While the public safety net addresses some of these needs, access to quality, affordable care for all in the region is insufficient.

FIGURE 9. UNINSURED BY EMPLOYMENT STATUS, 2009, AUSTIN-ROUND ROCK MSA

- Employed
- Unemployed
- Not in Labor Force*



* Individuals not currently looking for work.
Source: US Census Bureau. (2009). American Community Survey.

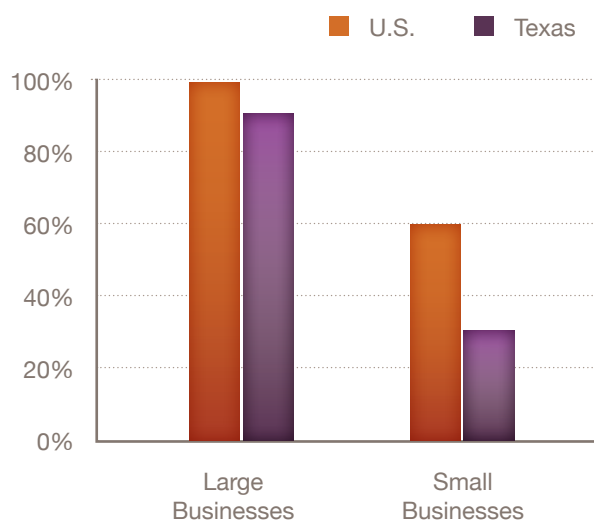
While most large employers offer health insurance, most small businesses can not afford to, leaving many workers underinsured (see Figure 10). This trend is particularly concerning in Central Texas since small business comprises the largest sector of the economy; in Austin, two thirds of businesses have fewer than 100 employees and 90% of small employers have fewer than 10 employees.³⁸ Unlike other states, Texas does not offer subsidies to help offset the cost of insurance to small businesses nor does it levy penalties for not enrolling employees.

“In working with small businesses they have a lot of challenges, and one of them is attracting and retaining employees. These people are so busy working ‘in’ their business they don’t have time to work ‘on’ their business.”

ANDY MARTINEZ

Greater Austin Hispanic Chamber of Commerce³⁹

FIGURE 10. PERCENT OF BUSINESSES OFFERING HEALTH INSURANCE



Source: Combs, S. (2011). State Health Care Spending. Texas Comptroller of Public Accounts.

Everyone is paying more for health care.

It is estimated that, in 2008, employers in Texas spent \$29.6 billion in health care costs.⁴⁰ General Motors estimated that up to \$1,500 for every car produced went to pay for health coverage and blamed rising health care costs for its reduction of 25,000 jobs.⁴¹ In Central Texas, health care spending rose 138% between 1999 and 2010, while wages increased only 42%.⁴² Statewide most large employers paid the majority of health insurance premiums, costing upwards of \$10,188 per employee in Texas; however, the cost increases have been transferred to employees in the form of lower wages and higher priced consumer goods.⁴³ For small employers, the impact of rising health care costs is more acute, as health premiums are more expensive for smaller groups. For those who choose to cover their employees, increasing health premiums often force employers to choose between reducing health care coverage or laying off workers.

Insurance status varies widely by county, race and ethnicity.

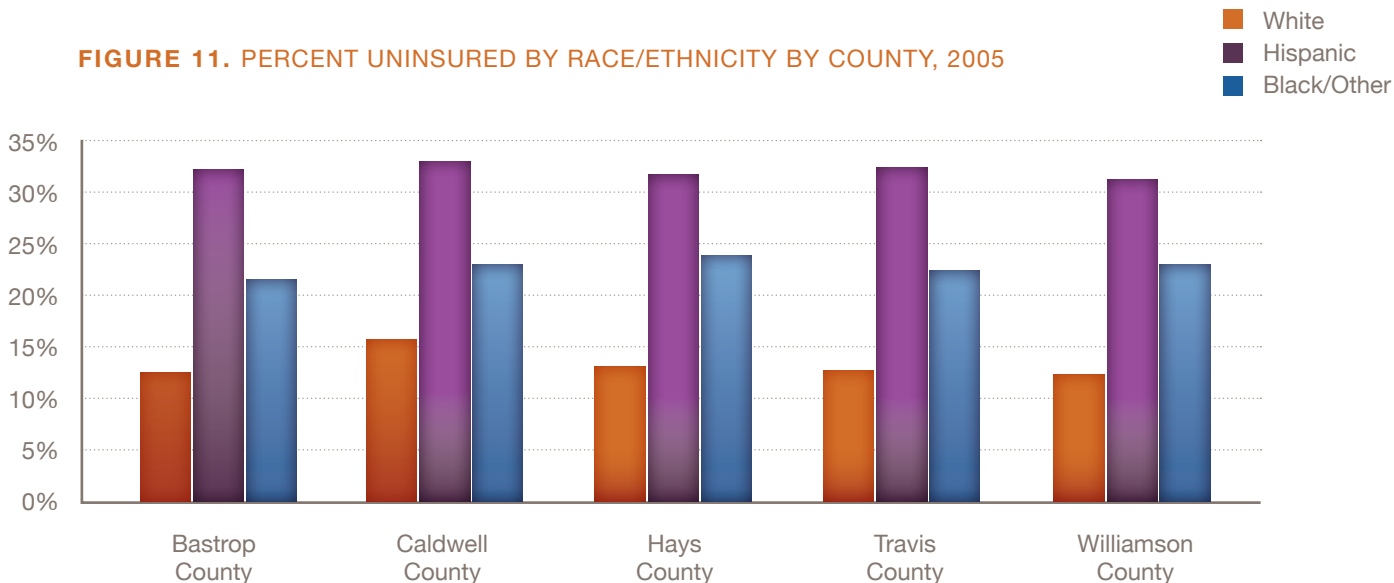
In Central Texas, 18.7% of residents in Williamson County are uninsured versus 26.8% of residents in Bastrop County, compared with 17% nationwide (see Table 7). Across the region, there are dramatic differences in health care coverage by race/ethnicity (see Figure 11). **The average profile of an uninsured individual in Central Texas is aged 18-44, locally employed, and Hispanic or African American.**⁴⁴ Estimated changing demographics in population growth across the region will increase the cost of health insurance making coverage less affordable to the populations that need it most.

TABLE 7. PERCENT UNINSURED, AGES 0-64, 2007

	Bastrop County	Caldwell County	Hays County	Travis County	Williamson County	Texas	U.S.
% uninsured, 2007	26.8%	26.5%	25.9%	25.0%	18.7%	28.0%	17.0%

Source: Texas Department of State Health Services. (2010). 2007 Health facts profiles for Texas.

FIGURE 11. PERCENT UNINSURED BY RACE/ETHNICITY BY COUNTY, 2005



Source: Texas State Data Center and Texas Department of State Health Services. (2010). 2007 Health facts profiles for Texas.

Reduced coverage is compounding disease and cost.

With some employers implementing cost containment strategies, such as reducing or dropping coverage, individuals are experiencing greater barriers to accessing care that could prevent or reduce complications from otherwise manageable disease. This trend increases costs for everyone.

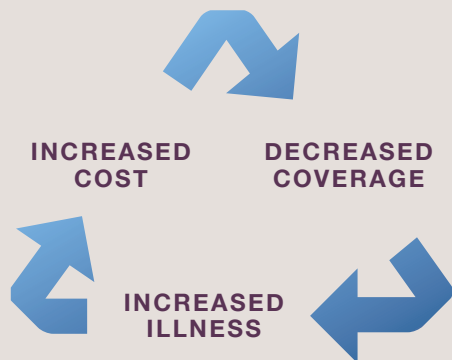
For example, if a worker does not have adequate health insurance, he is less likely to seek timely or appropriate health care. If he gets sick, he might seek emergency care for what could have been a preventable illness and will spend more on treatment with often worse outcomes. If the worker cannot pay because he is uninsured, the hospital will absorb the cost of care and drive up charges to compensate. The hospital's insurer will increase premiums and pass on the cost to employers and individuals in the form of increased cost or decreased benefits; thus, those who are insured pay a higher price for health care to cover the costs of those who are uninsured. This cycle has been leading to a growing spiral of increased cost, decreased coverage and increased illness (see Figure 12).⁴⁵

“This cycle had happened for so long. Oftentimes we have people who have lost their job due to their chronic illness which in turn leads to a cascade of events including losing their insurance. This, in turn, only limits access to a physician and increases their complexity of disease. When we can be proactive about connecting patients to the right resources, then only are we able to break this cycle.”

CYNTHIA BARRERA

Coordinator, Caldwell County Health Coalition

FIGURE 12. CYCLE OF COST, COVERAGE AND ILLNESS

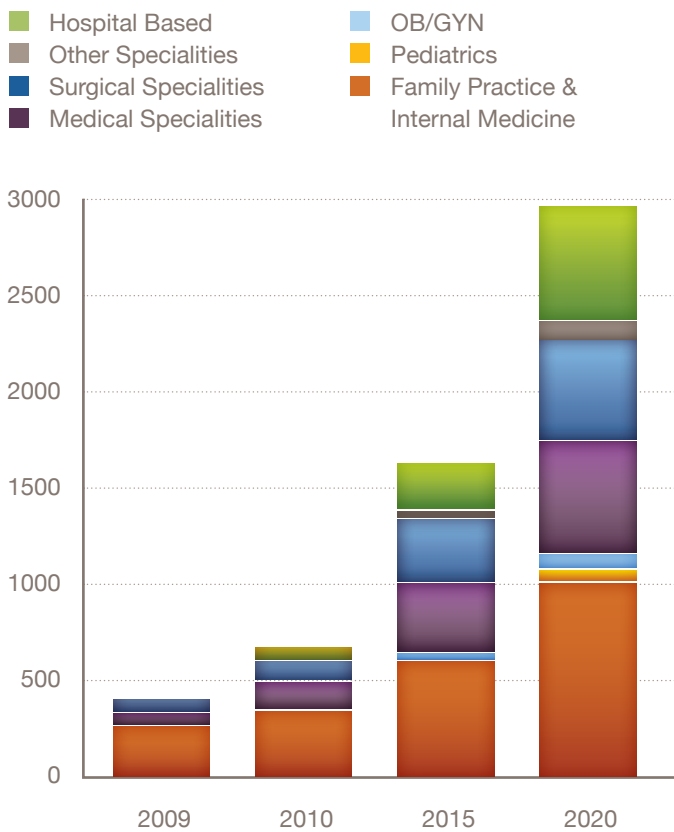


5. Provider shortages and misaligned incentives are hindering access to care resulting in inefficient health care spending.

The cornerstone to accessing timely, appropriate and preventive care is through a primary care provider; yet, all five counties in Central Texas have significant shortages of physicians, allied health professionals and nurses.

Ironically, while health care is one of the largest industry employers in Central Texas, all five counties in Central Texas have some designation as a “medically underserved area.”⁴⁶ This designation means that the number of primary care providers available to serve the population, percentage of elderly residents and rates of poverty and infant mortality did not meet national standards. It is estimated that, in 2010, the gap in the number of physicians between supply and demand was 600 physicians. It is projected to increase to nearly 3,000 physicians by 2020.⁴⁷

FIGURE 13. NEW PHYSICIANS NEEDED, 11-COUNTY REGION



Source: Seton Healthcare Family. (2009). Analysis by Seton Family of Hospitals.

The same gap is seen for specialty care, particularly in the area of medical and surgical sub-specialties. Whereas in 2010, it was estimated that 238 new physicians were needed in medical and surgical sub-specialties (the gap between supply and demand), it is expected that 620 physicians will be needed in these areas in 2015 and 1,090 in 2020 (see Figure 13). The provider shortage is even more exacerbated for patients with public insurance such as Medicaid and Medicare, as fewer providers will accept the ever shrinking reimbursement rates. Additionally, there is currently increased demand for treating illnesses such as depression and substance abuse, perhaps as a result of the down economy, but there are also insufficient numbers of providers in these areas to meet the need.

“The number one issue in all five counties is access to primary care. Six weeks to get an appointment is unacceptable. We have significant health care challenges that will not be met and addressed without significant change in how we think about health and health care in the region.”

STEVE CONTI

Director of Disease Management, Seton Healthcare Family, and Caldwell County Health Collaborative

“The serious deficiencies in our programs to deal with mental health issues require vigorous and comprehensive efforts to improve both outpatient and inpatient care services.”

KENNETH SHINE, MD

Executive Vice Chancellor for Health Affairs, University of Texas System



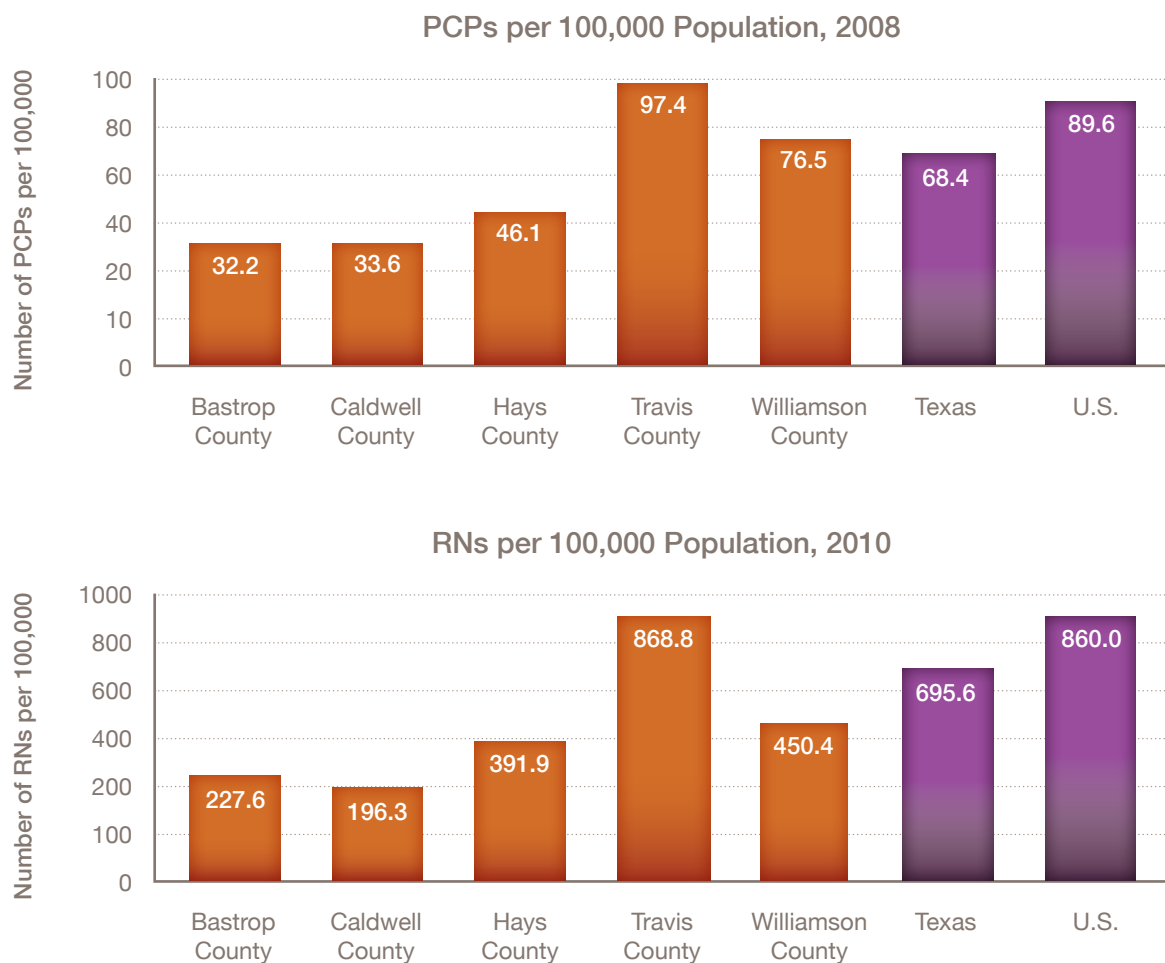
Travis County is the medical hub in Central Texas and tends to have the most health care resources, yet it does not have the capacity to serve its own growing population. While resources may seem abundant in Travis County, the data understate the capacity of providers in the area, which serves as a usual source of care for individuals from across the five-county region in addition to its own residents. Furthermore, since fewer area providers accept Medicaid or treat the uninsured, there is even less capacity available to serve the entire population. The shortages of primary care physicians and registered nurses are most significant in Bastrop and Caldwell counties, although Hays and Williamson counties also lack sufficient numbers of primary providers and registered nurses (see Figure 14).

“We have a lack of providers in primary care, specialty care, mental/behavioral health, and oral health.”

THOMAS COOPWOOD, MD

Chairperson, Central Health Board of Managers

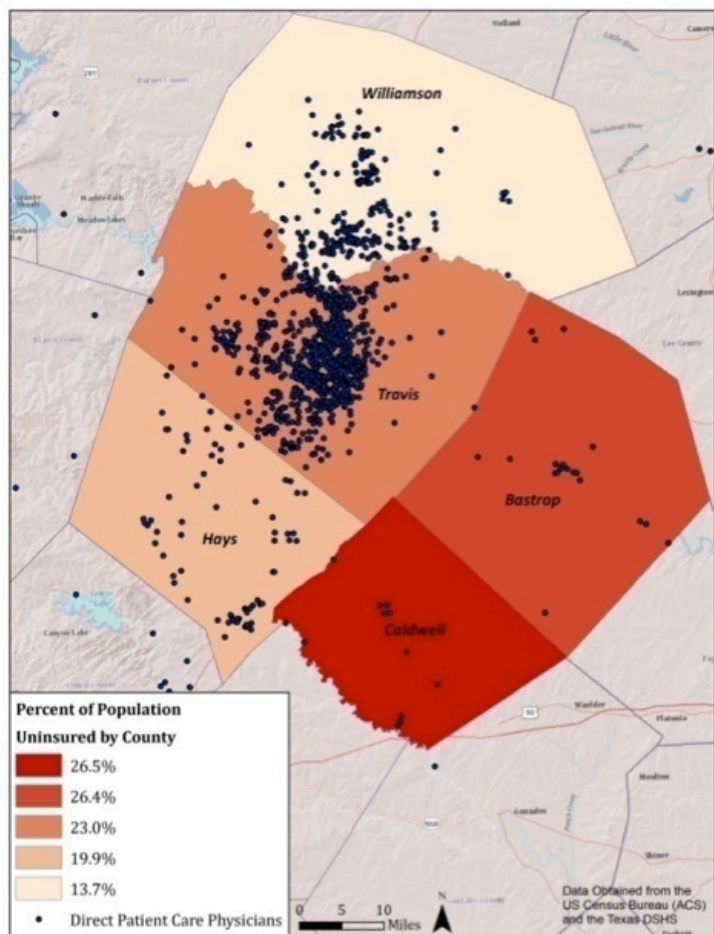
FIGURE 14. MEDICALLY UNDERSERVED AREAS: NUMBER OF PRIMARY CARE PROVIDERS AND REGISTERED NURSES PER 100,000, BY COUNTY, TEXAS, AND U.S.



Source: Texas Department of State Health Services. (2008). Primary care physicians by county of practice. Health Professionals Resource Center; Center for Workforce Studies. (2009). State Physician Workforce Data Book. 2009.; Texas Department of State Health Services. (2010). Registered nurses by county of practice. Health Professionals Resource Center. Kaiser Family Foundation. (2010). Registered nurses per 100,000 population. State Health Facts.



FIGURE 15. MAP OF CENTRAL TEXAS: LOCATIONS OF PHYSICIANS AND PERCENT UNINSURED



Source: US Census Bureau; Texas Department of State Health Services

Due to provider shortages, parts of three of the five counties in Central Texas (Bastrop, Caldwell, and Travis counties) are designated by the government as health professions shortage areas (HPSAs) (see Figure 15). Residents living in HPSAs are more likely to:

- Be uninsured and in fair or poor health
- Have at least one chronic condition
- Not access timely prevention services
- Have no usual source of care such as a primary care provider, leading to inappropriate use of emergency rooms
- Have worse health outcomes.⁴⁸

In order to address barriers to accessing care, Federally Qualified Health Centers (FQHCs) have emerged as critical providers of needed health care and prevention services in Central Texas. In partnership with community organizations and hospitals, FQHCs such as CommUnityCare and Lone Star Circle of Care have established networks of community-based facilities to meet the complex health and health care needs of people living in underserved neighborhoods who are uninsured or receive public insurance. Lone Star Circle of Care alone has a network of over 25 clinics across Central Texas and provided 202,000 patient visits in 2010. Prevention and treatment of illness, education and outreach, coordination of care, nutrition, counseling and other social services are offered at low or no cost to individuals.

Existing services are not always sufficient. The health care system in Central Texas is complex and difficult for any resident to navigate, and is further compounded by barriers related to language, economics, transportation and cultural differences. Scheduling an appointment can be challenging, and many patients, particularly those with public insurance, are known to encounter long wait times when trying to get an appointment particularly to see a specialist. These trends are mirrored nationally, as research has found that children with Medicaid are far more likely than those with private insurance to be turned away by medical specialists or be made to wait more than a month for an appointment, even for serious medical problems.⁴⁹

Current and future health care providers have limited education and professional training opportunities.

Austin is the only metropolitan city of its size without a medical school, further exacerbating challenges to recruiting physicians to the area. Medical schools supply many growing communities with a continuous stream of physicians who often choose to practice where they trained. As discussed later in this paper, a medical school and its associated research institutes may not only expand the pool of health care providers but also spark further investment in the community.

FIGURE 16. TEXAS RANKINGS ON HEALTH SYSTEM PERFORMANCE INDICATORS, AMONG 50 STATES AND WASHINGTON, DC



Inappropriate and uncompensated care hurts quality and drives up costs.

Texas ranked 49 out of 50 states and Washington, D.C. on state health system performance. In this national study conducted by The Commonwealth Fund, Texas failed to address essential indicators such as access, quality and ensuring all populations benefit from health care. From a cost perspective, Texas also ranked low in using health care appropriately (see Figure 16).

More comparative data are needed to evaluate Central Texas, but there are some indicators that suggest opportunities to improve access, quality and avoidable cost. Approximately, three quarters of national health spending and 8 out of 10 deaths are due to chronic and often preventable diseases.⁵⁰ About 80% of health care dollars are spent in the last 5 years of one’s life and almost one third of total spending on health care is considered wasteful, meaning this care could be eliminated without reducing health care quality. In the U.S., it is estimated that \$250–325 billion is wasted each year on unnecessary care. Table 8 shows how improving quality of care through coordination, appropriate use and prevention can eliminate system waste.

Note: Rankings out of 51 geographic areas: 50 states and Washington, DC

Source: The Commonwealth Fund. (2007). *Aiming Higher: Results from a State Scorecard on Health System Performance.*

TABLE 8. ESTIMATES OF ANNUAL HEALTH CARE SYSTEM WASTE IN THE U.S.

Leading Causes of Health Care Waste	Factors Involved in Health Care Waste	Annual Cost (\$)
Lack of Care Coordination	Duplicate tests, Emergency Room use instead of primary care, etc.	\$25–50 billion
Unwarranted Use	Care that provides no marginal value	\$250–325 billion
Preventable Conditions	Preventable illness	\$25–50 billion

Source: Kelley, R. (2009). *White paper: Where can \$700 billion in waste be cut annually from the U.S. healthcare system?* Thomson Reuters.

In Central Texas, as many as 75% of emergency room visits are preventable.

Unnecessary emergency room use and hospital admissions have increased, in part to make up for lack of access to, or ineffective management by, a usual source of care such as a primary care provider. This is not just a problem for the uninsured; more than half of unnecessary visits to the emergency room were by patients with commercial insurance. Approximately 16% of asthma patients and 34% of home health patients could have avoided hospitalization with better access and care management.⁵¹

“Too many people go to the ER for basic care, often too late. This is very costly and could be avoided with better prevention.”

JUDGE SAMUEL BISCOE

Travis County Commissioner's Court

Our health care system has misaligned incentives that reward sickness over health.

The health care system in Central Texas mirrors the nation's, which was built on treating the sick rather than promoting health and preventing illness. With the current “pay-as-you-go” model of reimbursement, there are few incentives for patients and providers that encourage healthy behaviors, prevent and manage disease, and reduce unnecessary services. One study estimated that if Medicare patients each enrolled with a primary care provider in a “medical homes” model, the U.S. health care system would save \$194 billion.⁵² Consider how misalignment of incentives reduces quality of care and increases cost such as:

- *Compensation for services instead of successes:* The majority of the health care reimbursement continues to pay physicians on a “fee-for-service” basis, a practice more frequently used in specialty care. This approach tends to reward providers for ordering more diagnostic tests and procedures rather than focusing on prevention and management of disease. As a result we are paying more than we should for health care without significant improvements in health. One study showed that Medicare could save \$10 billion and improve care with appropriately aligned incentives.⁵³

- *Uncompensated care:* While physicians in the community may turn away patients, hospitals must treat every patient who comes through its emergency room despite the potential for no reimbursement. To compensate services rendered to the uninsured, hospitals charge more for those who can pay for care which drives up costs for all who pay for insurance.
- *Lack of competition:* Research has shown that competition in health care helps improve clinical, operational and financial outcomes.^{54, 55} Locally, regional leaders have noted that the apparent lack of competition and reliance on silos of specialty care in Central Texas may be contributing to higher costs compared with neighboring communities like San Antonio.

Until provider reimbursement is realigned to expand and promote primary care and prevention and reward better management of disease, the system in Central Texas will perpetuate current practices of providing increasingly expensive care rather than better care.

“If you don't have a ‘health care home,’ you don't have the ability to establish a relationship with a doctor. Your access point to care is an Emergency Room, not your doctor.”

DESMAR WALKES, MD

Health Authority, Bastrop County

“We need to start thinking creatively. Let's start thinking more about evidence-based practices, community strategies and communicating with patients. We need to think about a different type of delivery system.”

BOBBIE BARKER

*Vice President, Grants and Community Programs,
St. David's Foundation*



Conclusion

Central Texas is growing faster than the system needed to support a healthy, diverse and prosperous community. To address the issues of cost, coverage and illness, we need to build, align and sustain an infrastructure that supports healthy lifestyle choices and addresses a health care system that rewards health (see Figure 17). This is critical to the quality of life and economic prosperity of the region.

The first step is to engage multi-sector partners to create a more streamlined, efficient and accountable system of health and health care that is accessible to a broader population. This will slow the rising costs of health care and improve the health and quality of life of all Central Texas residents.

By aligning our efforts in creating health policies, investing in a healthy infrastructure and promoting health and wellness, we can all take part in transforming the cycle to improve health and expand access to affordable, quality health care, thereby making Central Texas an even more auspicious place to live and work.

“We have an opportunity to bring traditional players into alignment with one another, as well as reach out and expand this group to include leaders who may not see health as core to their mission.”

ANDY MILLER, MHSE, MCHES

Executive Vice President of Mission, LIVESTRONG

FIGURE 17. SYSTEMS ALIGNMENT: HEALTH POLICY, HEALTH INFRASTRUCTURE AND HEALTH PROMOTION/WELLNESS





Forging a Path to Health

Looking ahead, there is an opportunity—and a responsibility—for everyone to take part in working to improve our region’s health. Public and private organizations in Central Texas are poised to make a greater impact with a coordinated effort focused on health and health care infrastructure development.

To some, investing in solutions to improve health may not sound feasible, especially in a down economy. However, we know there is a return on investment for health:

- As much as 80% of chronic illness is preventable
- Up to 30% of health care spending is wasted.⁵⁶

Impacting health requires a multidimensional approach that includes aligning lifestyle choices and options, business practices, community norms and health policies. Whether it is an individual decision to become more active, the availability of a health and wellness program at work, accessibility and availability of safe, green space in a neighborhood, or insurance coverage policies that incentivize gym membership, change is needed at multiple levels. An effective regional approach will include multiple strategies within a variety of settings that affect individual and family behavior, organizational practices, community norms and public policy.

In the previous section, we identified compelling trends that necessitate action. In this section, we will share examples of successful, innovative efforts to help us take action, create change and improve quality of life.

“We know the current health care system is not working. Change needs to happen. We need to focus on how we’re going to create change.”

CLARKE HEIDRICK

Attorney at Graves, Dougherty, Hearon & Moody and member of the Board of Managers, Central Health

For every \$1 invested in proven programs that improve health there is \$5.60 of savings in improved productivity and retention.⁵⁷

Sharing best practices from a national perspective and learning about the successes in our own communities, we can advance the region as a national model for health and health care and build a healthier community.

This can be achieved by adopting the following tenets:

- 1. Health insurance coverage improves employee health, productivity, satisfaction and retention.**
- 2. Disease prevention and health promotion are less expensive and more effective than treating illness.**
- 3. A community with more robust health infrastructure will attract a more educated and entrepreneurial workforce.**
- 4. Aligning incentives, access and health care delivery makes the health care system more efficient and results in better quality and outcomes.**
- 5. Developing multi-sector partnerships can improve our health and economic sustainability.**

1. Health insurance coverage improves employee health, productivity, satisfaction and retention.

Comprehensive insurance coverage improves employee health and increases productivity.

Uninsured, working-age Americans have a 40% higher risk of death than their privately insured counterparts.⁵⁸ Reduced insurance coverage discourages utilization of services that may better manage care, leading to higher costs down the road—and the “spiral of declining health”. Therefore employers’ cost cutting strategies of reducing coverage may be counterproductive. Studies show that as health insurance coverage increases, Americans are more likely to get screenings and less likely to incur unnecessary spending and receive substandard care.

The U.S. loses an estimated \$260 billion in economic output due to workers’ ill health.⁵⁹ Investment in employee health can reduce an average of 28% in sick leave absenteeism, 26% in health care costs, and 30% in workers’ compensation and disability management claims.⁶⁰ Health care coverage also improves employee performance at work.⁶¹ By investing in innovative approaches to prevent and manage chronic illness, employers reap the benefits of creating a healthy workforce that has decreased absenteeism, is more satisfied and more productive.⁶²

TexHealth Central Texas, a non-profit supported by Central Health, Hays and Williamson County Commissioners and the Austin Community Foundation, is enabling more small businesses in Travis, Williamson and Hays Counties to provide affordable health insurance coverage for its employees. The program offers comprehensive coverage including preventive services, doctor and hospital visits and prescription drugs, which net tax credits and premium assistance costing small employers as little as \$55 per month per employee.

“We have a tremendous need for health care in our community. We need to be open to pragmatic solutions. Providing access to health care is good for business and good for the community.”

JACK HUNNICUTT

Chair of the Board, Lone Star Circle of Care

Employer-based coverage improves satisfaction and retention.

A healthy employee is more likely to be happy, productive and take fewer sick days. Programs that promote health and prevent disease are estimated to save money and improve employee morale. Employer-based health insurance coverage is critical to defray the overall cost of insurance and to support improved access to preventive care. It also helps recruit and retain top employees and contributes to a company’s positive corporate image.⁶³ Yet only 44% of those employed in Texas obtain their insurance through their employer.⁶⁴ In a national survey, 75% of employees from large businesses said that health insurance is their most important benefit with 83% preferring to have reduced compensation if it meant keeping health coverage.⁶⁵

Purchasing coalitions can make health insurance more affordable.

Affordability is the number one reason employers cite for not providing any or adequate health coverage to their employees.⁶⁶ For some of the 68% of small employers in Texas currently not offering their employees health insurance,⁶⁷ joining a purchasing coalition could reduce costs through better purchasing clout and a more favorable risk profile with which to negotiate better premiums. Purchasing coalitions also provide expertise on health benefits purchasing that many small employers typically lack. Businesses are becoming savvier about strategically purchasing and managing insurance benefits, using quality and cost measurement to inform “value based purchasing” to reduce cost and improve health. Coalitions such as the Council of Smaller Enterprises (COSE) in Cleveland, Ohio estimated it saved small businesses as much as \$45 million annually in premium costs while offering a choice of 25 different health plans to its members.⁶⁸

TABLE 9. VALUE-BASED PURCHASING: EMPLOYER STRATEGIES TO IMPROVE HEALTH CARE COST AND QUALITY

Strategies for Value-Based Purchasing	Description
Tighter managed care networks	Awarding contracts to managed care companies that have more cost-effective, high quality providers creates better cost and quality outcomes.
Use of disease management programs	Identifying and managing employees with behavioral risk factors and chronic disease helps employees better manage their condition and prevents costly complications.
Use of consumer-driven health plans	Empowering consumers; studies suggest that when consumers have cost and quality information available, they make better choices about health utilization and spending.
Requiring higher employee cost-sharing	Shifting costs to employees in the form of increased copayments, deductibles or a greater share of health premiums. of health benefits

Source: Kelley R. (2009). *White paper: Where can \$700 billion in waste be cut annually from the U.S. healthcare system?* Thomson Reuters.

A recent survey by the Employee Benefit Research Institute surveyed large and small employers about the “value-based purchasing” techniques they believe are most effective to manage health and cost. These techniques are being used by employers of all sizes (see Table 9).

The Austin-based Mayor’s Fitness Council is a consortium of area businesses that is improving business adoption of “value-based purchasing” initiatives. It is also addressing the issue of increasing the level of activity among the region’s working populations. These efforts enable employers to get more for their insurance dollar by providing tools, expertise and support for its partners to implement employee health and wellness programs in areas such as better nutrition, increased physical activity and tobacco cessation and prevention.

2. Disease prevention and health promotion are less expensive and more effective than treating illness.

TABLE 10. ESTIMATED NATIONAL SAVINGS FROM DISEASE PREVENTION

Preventable Chronic Disease	Percent Reductions in Prevalence Yielding Savings
Type 2 diabetes and blood pressure	5% reduction saves \$5 billion
Heart disease, kidney and stroke	5% reduction saves \$14 billion
Cancer, COPD, arthritis	2.5% reduction saves \$2 billion
Total	\$21 billion

Source: Levi, J., Segal, L.M., & Juliano, C. (2009). *Prevention for a Healthier America: Investments in Disease Prevention Yield Significant Savings, Stronger Communities*. Washington, DC: Trust for America's Health

While 75% of national health care spending is due to chronic and preventable disease,⁶⁹ only four cents (\$.04) of every dollar is spent on prevention and public health.⁷⁰

Research shows that prevention initiatives in the leading disease areas reduce prevalence of illness, decrease costs, and measurably improve health (see Table 10). Wellness programs are relatively inexpensive and are an effective means of preventing chronic disease by promoting healthy living such as eating healthy, being active, controlling weight and eliminating tobacco use.

“Two reasons we invest in wellness programs: first, to treat our employees right, and second to save money. Our health care costs have gone down – for every \$1 we spend on an employee, we save \$3.”

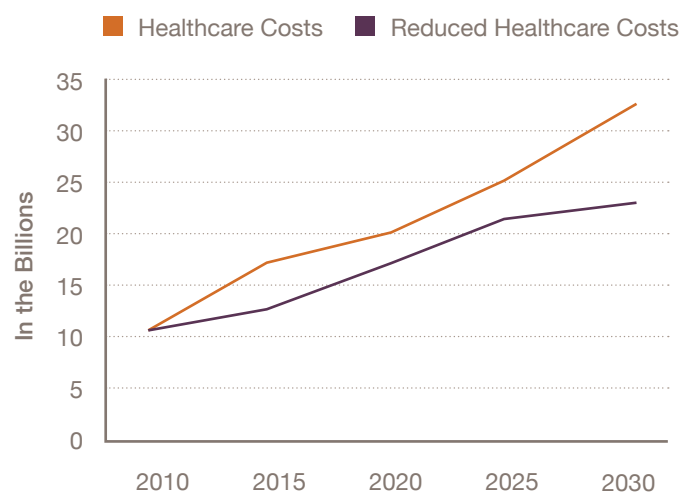
DOUG ALLEN

*Capital Metropolitan Transportation Authority*⁷¹

Addressing the obesity epidemic through prevention and health promotion strategies provides the greatest evidence of cost savings.

Current lifestyle behaviors are expected to increase health care costs to \$325 billion by the year 2030. If we addressed obesity alone, we could alter this cost trend with a savings of \$9 billion (see Figure 18).

FIGURE 18. PROJECTED COSTS OF OBESITY-RELATED HEALTH CARE IN TEXAS: SCENARIOS OF PREVENTION PROGRAM IMPLEMENTATION VS. STATUS QUO



Source: Combs, S. (2011). *Gaining Costs, Losing Time: The Obesity Crisis in TX*. Texas Comptroller of Public Accounts.

Supporting health promotion and disease prevention is a good financial investment.

With an average return of \$5.60 for every \$1 invested in proven programs and policies to increase physical activity, improve nutrition and prevent smoking and other tobacco use, the country could save more than \$16 billion annually within five years.⁷² This is possible because **only 5% of patients make up for half of medical spending.**⁷³

- At this rate Texas alone could save an estimated \$1 billion within this same five year period.
- Health promotion and disease prevention programs often achieve savings within 12 to 18 months.⁷⁴
- Savings are sustainable; employer-sponsored programs that reduce risk status save up to \$53 per employee for every year that the employee remains in a low-risk group.⁷⁵

Advanced Micro Devices (AMD) in Austin, TX is expanding its efforts to create a healthier workforce among its 2,930 employees with its program AMD@work. To further encourage participation, AMD will roll out an employee incentive program to help reward and reinforce healthy behaviors. Through telephonic coaching, providing work out facilities and serving healthy food options in their onsite café, executive leaders have placed a priority on worksite wellness.

Effective wellness programs and policies make it easier for employees to live a healthier life.

Eating right and exercising can be challenging considering constraints related to work hours, commute time, transportation options, childcare issues and/or accessible and affordable options. Many employers are addressing these barriers by developing innovative approaches to actively enroll participants in wellness programs, communicate wellness benefits and provide incentives to support a healthy lifestyle at work and at home.⁷⁶

Employees respond to financial incentives to improve health.

Businesses small and large are rewarding employees that enroll in wellness initiatives and achieve health goals. In addition to creating on-site programs, employers can take advantage of programs that are already available in the community. For example, many health plans offer members free or discounted membership at a local fitness center or smoking cessation classes. Employers may only need to educate, enroll and support employees to reinforce behavior change.

Policymakers are passing tobacco bans to address the leading cause of preventable death.

It is estimated that reducing adult smoking in the U.S. by 1% could prevent 30,000 heart attacks, 16,000 strokes and save \$1.5 billion over five 5 years.⁷⁷ Currently, 14% of adults in Central Texas are smokers.⁷⁸ Yet, Austin is the only city in Central Texas to pass a comprehensive local ban on smoking in the workplace, bars and restaurants, with three other cities in the region passing partial bans. Unlike Texas, 32 states and the District of Columbia have passed some form of statewide smoke-free policy covering the workplace, restaurants or bars.

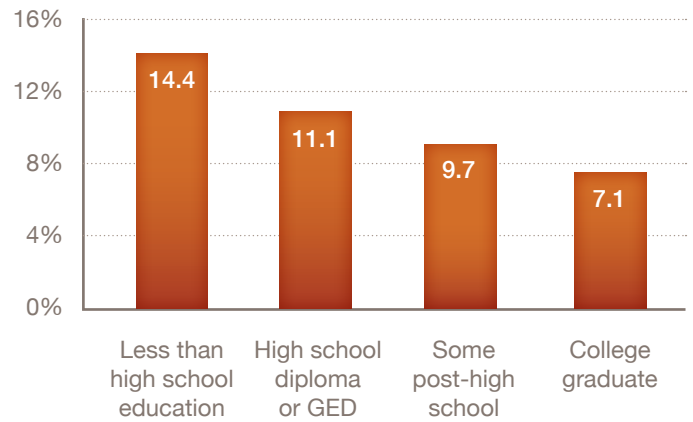
Dell reports a higher level of engagement in health promotion efforts with its health insurance premium discounts. With incentives of up to \$728 per employee or \$1,456 per family per year, employees have increased participation in wellness initiatives such as weight and blood pressure management programs.⁷⁹

*Live Tobacco-Free Austin, sponsored by the **Austin/Travis County Health and Human Services Department** and funded through the federal **Communities Putting Prevention to Work (CPPW)** grant, supports innovative programs and policies in workplaces and provides resources needed to help tobacco users quit. As a partner in this initiative, Austin Travis County Integral Care has implemented a 100% tobacco-free campus policy at all 36 of their outpatient clinic sites and all four of their residential facilities. Such policies effect long-lasting changes to reduce the health and economic burden of tobacco use and support tobacco-free environments where people live and work.*

Improving education is an excellent prevention strategy.

Education has been shown to be a strong prevention strategy by supporting life-long literacy as well as providing opportunities for greater job growth. This can lead to greater financial security, better quality housing and better access to goods and services, all of which have a significant impact on health. For example, improving graduation rates helps improve health. Figure 19 shows that the percent of college educated adults with diabetes was half as much (7.1%) than those that received less than a high school education (14.4%).

FIGURE 19. PERCENT OF ADULTS IN TEXAS DIAGNOSED WITH DIABETES, BY EDUCATION LEVEL, 2009



Source: Centers for Disease Control and Prevention. (2009). Behavioral Risk Factor Surveillance System (BRFSS).

*The home-based Diabetes Education Program of the **Community Health Coalition of Caldwell County** partners with local health care providers and social services agencies to address the challenges associated with improving access to care for the uninsured and underinsured adult population who have been diagnosed with, or are at risk for developing, Type 1 and Type 2 diabetes. The program aims to increase the quality of life for diabetic residents, reduce the financial burden of uncompensated care resulting from preventable utilization, reduce health care disparities and provide a comprehensive approach to chronic disease management.*

School-based health promotion is also an effective strategy to promote lifelong healthy behaviors.

Employers, policymakers and coalitions are investing in programs that promote health and prevent disease by reaching individuals at work, at school and in the community. Addressing these issues early in children's lives is critical, as their health and education can have a significant impact on their success as the future workforce in the region.

*"We are failing our children." This powerful message spurred leaders across the region to form the **E3 Alliance (Education Equals Economics)** to build a comprehensive educational blueprint to ensure every child can achieve his/her full potential. This regional collaborative of public and private partners, founded by the Austin Area Research Organization, University of Texas at Austin and Austin Community College District, aims to serve as a catalyst for educational change. To kick off this effort, over 1,000 community representatives across multiple stakeholder groups participated in a series of community-based, multi-night, in-depth dialogues to identify solutions to build an actionable strategic plan for schools.*

*The **Florida Healthcare Coalition (FHCC)** partnered with local schools and the American Lung Association of Central Florida to help better control asthma among dependent children of employees, and those in the local schools and the broader community. Using a school-based asthma risk assessment and health education program for children, FHCC was able to reduce children's emergency department visits and the associated work time lost by parents.*

*The **Austin Independent School District (AISD)** has enacted innovative pilot programs with community partners to provide health services. In coordination with Dell Medical Center, the Children's Health Express Mobile Pediatric Care Van affords access to medical care and case management services to low income students, while a Sports Physicals initiative, co-sponsored with the Travis County Medical Society, facilitates participation in organized physical activity by providing required exams.*

3. A community with more robust health infrastructure will attract a more educated and entrepreneurial workforce.

Promoting policies and economic development strategies to build an infrastructure will make healthy lifestyle options available to everyone.

Many people say there is no better place to work or live than the Central Texas region. Its growing business community provides an exciting vision for the future, including opportunities for advanced education, new industry development, and in-migration to the area. However, in Central Texas, essential goods and services – including health care, good schools, affordable fresh fruits and vegetables, safe parks and recreational areas, quality housing and transportation options—are not accessible to all members of the community.

Sections of particular concern are the urban neighborhoods along the I-35 corridor and in the outlying rural areas of Travis, Bastrop, Caldwell, Hays and Williamson counties, where high risk populations have limited public transportation options to access health and medical services. This disparity underscores the need to build on regional development by expanding the number of health amenities that will support healthy communities, and contribute to Central Texas being a desirable place to live and work.

The WilCoWellness Coalition in Williamson County is finding ways to improve the health and nutrition of the county when residents dine out in its Por Vida/ For Life initiative in Georgetown. In collaboration with the San Antonio Healthy Restaurants Coalition, Por Vida encourages restaurants to evaluate the nutritional value of their food selections and use common designations for customers to signify healthy choices on their menus.

“When you’re looking to start or grow a business, you look at the infrastructure, which includes a power grid, transportation, educational opportunities, a skilled workforce and health care. A community that doesn’t have good access to health care cannot support good economic growth.”

PETE PERIALAS, JR

CEO, Lone Star Circle of Care

Proximity of healthy lifestyle options near work, home and schools matters.

Economic redevelopment and revitalization policies can influence city-center and community expansion to include accessible amenities that support healthy behaviors and lead to improved health. These changes made at both an individual and societal level successfully stimulate the economy while preventing chronic diseases such as obesity, diabetes, cardiovascular disease, cancer, osteoporosis and oral health disease. Studies show that proximity and convenience increase behavior change.

- Residents who live in “walkable neighborhoods” are more physically active, up to 70 minutes more a week.⁸⁰
- The closer people live to trails, the more likely they are to use them; as many as 59% of users in Chicago used trails “virtually every week or every day.”⁸¹
- Physical activity increased among young children with access to a park area close to home.⁸²

As part of employee wellness, H-E-B grocery stores sponsors the Slim Down Showdown, which supports healthy lifestyles among employees using peer support, “healthy hero” champions as well as healthy cooking and fitness challenges. Over 15,000 employees participated last year, many of whom lost weight while in the program.

Grocery stores improve neighborhoods as well as access to more nutritious food.

Central Texas needs better access to fresh fruits and vegetables. One study concluded that adding local supermarkets to a neighborhood increased fresh food intake by 32% for African Americans and 11% for white Americans.⁸³ In addition to making healthier food available, grocery stores also produce living-wage jobs, raise the value of surrounding property and anchor and attract additional businesses to the neighborhood.⁸⁴

Expanded professional education and training will bring more and higher quality providers to Central Texas.

Most providers tend to practice where they train. In Central Texas, these opportunities are insufficient to meet current and emerging needs; however, there are significant medical education programs in place upon which to build. University of Texas Southwestern Medical Center, in affiliation with Seton Healthcare Family and the University of Texas System, sponsors 200 residents in eleven core residency programs in Austin, while U.T. clinical faculty also teach approximately 100 third and fourth year medical students in Austin. The affiliation also provides for the creation of a Seton/U.T. Southwestern Clinical Research Institute with a director and up to 20 clinician researchers in Austin.

There are unique opportunities to continue expanding medical education to provide a high quality health care workforce for the region, by rapidly increasing interdisciplinary health education. For example, students from U.T. Austin (e.g., pharmacy, nursing, biomedical research and engineering, etc.) can train in health care teams with medical students and residents to provide a more effective and efficient health care delivery system that serves more patients and lowers costs. Local colleges and universities such as Texas State University have recently expanded their health professions training programs, such as nursing and physical therapy, to help meet the need for more practitioners. Additionally, Texas A&M Health Science Center College of Medicine offers third and fourth year clinical training for medical students at regional clinical campuses. Currently, the ability to expand the number of students in these programs is limited by the number of available classes and internship positions in teaching hospitals.

A medical school and clinical research can attract an entrepreneurial workforce and economic investment.

There is a strong momentum in the region to implement a comprehensive vision to strengthen medical education and the larger health care system. This involves building a medical school in Austin as well as increasing coordinated out-patient multi-specialty care, building a modern teaching hospital, developing a comprehensive cancer center, expanding specialty care facilities, integrating residency programs in community-based settings, and developing a collaborative research institute and laboratories to promote innovative public and private research.

An economic study by The Perryman Group suggested that building a medical school and fostering biotechnology growth in Austin could bring nearly \$27 billion to the region with average development. However, if Texas were to achieve a biotech concentration similar to that of Massachusetts and California, the economic revenue would double.⁸⁵

In addition to addressing shortages of health professionals, it is projected that a medical school and expanded health care facilities will improve the health of the population by increasing the availability of primary care physicians and medical subspecialists, care for the uninsured and underinsured, research discovery and clinical trials that advance medical science, and stimulation of new industry growth (e.g., technology and biotechnology) and entrepreneurship. This type of expansion would attract businesses with high wage jobs requiring a more educated workforce, and support additional economic development. A study by the economic research firm, Texas Perspectives, projected that expanding academic medicine in Central Texas, such as by developing a medical school – along with its ripple effect of investment in the local economy – could produce an additional \$2 billion in annual economic activity and earnings and nearly 15,000 permanent jobs in the region through spending related to education, life sciences and other sectors to support these growth areas.⁸⁶ The community is exploring the feasibility and benefit of leveraging the substantial medical education and research activities taking place in the region, along with the strength of existing health professional educational programs at U.T. Austin, to create a medical school in Austin.

4. Aligning incentives, access and health care delivery makes the health care system more efficient and results in better quality and outcomes.

States are driving market reforms.

While federal health care reform will change the health care landscape as it becomes instituted, for the past several years, states have been driving their own efforts locally to address access and cost of care. Many states are actively organizing efforts around initiatives such as those listed in Table 11. Texas is currently fast-tracking Medicaid reform to better serve its low-income population. The proposed “Section 1115 Medicaid waiver” will expand access to additional primary and specialty care services through requiring a significant redesign of the financial and delivery systems. These public sector reforms are expected to accelerate the changes that have begun to evolve in the private market. In order to succeed, the region will need to consider how to better manage the health care system within a fixed budget while ensuring patients have access to care, are receiving quality medical and preventive services, and leveraging tools and technology to achieve better health outcomes.

TABLE 11. STATE HEALTH REFORM INITIATIVES

- ✓ **Creating health insurance exchanges**
(e.g., purchasing cooperatives)
- ✓ **Testing new payment methods that improve quality and reduce cost** (e.g., global payments)
- ✓ **Simplifying administration**
(e.g., electronic tools to reduce paperwork)
- ✓ **Expanding access to care**
(e.g., state children’s health insurance program, SCHIP)
- ✓ **Reforming state programs**
(e.g., Medicaid waivers)

Primary care is the lynchpin for coordinating care and managing disease.

Regions with more general or primary care practitioners tend to deliver more effective, high quality care and have lower spending.⁸⁷ Higher quality care is often measured by the patient getting the right care (evidence-based) at the right time with a measurably improved outcome. As a result, primary care providers are assuming a greater role as a patient’s headquarters for care coordination, called a “medical home.” Because Central Texas does not have adequate numbers of primary care providers, it will need to be more creative about delivering services and attracting health care professionals to the region.

“We need to optimize the SYSTEM – historically we have only focused on the component parts. Our strategy won’t be to reduce clinical staff to patient ratios; our strategy will be to connect and align components around a single focus: person-centered care and reimbursement that recognizes and rewards integrated care models, better patient outcomes and ultimately greater overall value.”

CHARLES BARNETT

President and CEO, Seton Healthcare Family

The Austin Regional Clinic (ARC) is partnering with Blue Cross Blue Shield of Texas to improve health, serving nearly 45,000 patients from city government and other small businesses. Focusing on frequent users of the system, ARC is establishing a “medical home” in which a “health care navigator” is assigned to help individuals better coordinate care and ensure they attend medical appointments, take prescribed medications, and follow regimens such as improved diet and exercise.

In 2010, Opportunity Bastrop County collaborated with Seton Healthcare Family to hold a series of community summits. County-wide priorities identified included transportation, access to pharmaceuticals and access to health care services. Beginning on October 1st, Opportunity Bastrop County in conjunction with the Integrated Care Collaboration will implement the Prescription Pharmacy Access Program which will provide prescription drugs to individuals in the county who qualify. It is estimated that this program will save taxpayers approximately \$200,000 annually.

Expanding access to preventive, primary care and specialty providers decreases unnecessary emergency room visits, reduces costs and improves outcomes.

Patients with dental pain and those who suffer from mental health conditions are frequent users of emergency rooms. Expanding access to dentists as well as the continuum of care for mental health services would help provide appropriate care for these conditions in the right setting.

New reimbursement models are driving provider coordination of care through aligned incentives.

Primary care providers, specialists and hospitals are forming partnerships in the health community called “Accountable Care Organizations” (ACOs) in order to better provide patients with access to quality care, and to manage care within a budget. This model is a paradigm shift from individual providers working independently to a model in which providers would share the responsibility for improving care efficiently under one global budget, and be rewarded for measurably achieving positive outcomes. Some sources project that ACOs could save substantially on costs through reductions in unnecessary hospital utilization. For example, the CalPERS ACO pilot program reduced hospital stays by almost 15% including a 50% reduction of hospital stays of more than 20 days.⁸⁸ Significant infrastructure is needed to support ACO development, including sufficient numbers of primary care providers, data systems and electronic health records.

The University of Texas at Austin has made a commitment to providing culturally competent care, in particular, to address health disparities and the shortage of mental health providers. UT's Hogg Foundation for Mental Health is helping to grow the number of mental health providers by investing almost \$2 million to expand internships at schools, hospitals and community consortia, providing scholarships for Spanish-speaking social workers, and building networks to support African American mental health professionals.

Technology is transforming prevention and health care management.

Health and financial data are essential to develop prevention and treatment strategies. The health care system has been transitioning to electronic media to capture and share health information with providers that enables them to make better decisions about clinical care and measure effectiveness. Better use of technology has enabled efficiencies such as reduced paperwork and improved patient safety such as reduced drug interactions. Table 12 describes some of the technology innovations that are transforming care delivery.

In 1998, St. David's Foundation collaborated with the City of Austin on an oral health initiative to bring dental care to low-income elementary-age children. Since that time, the dental program has grown to become one of the largest mobile dental programs in the country serving children in Title I schools, patients in safety-net medical clinics and musicians through the Health Alliance for Austin Musicians. The Foundation continues to expand its efforts to improve the oral health of the underserved through grant making to community non-profit dental clinics and by taking the lead to form a new regional initiative, the Central Texas Dental Collaborative.

Integrated Care Collaboration (ICC) seeks to improve the delivery of health care services for the Central Texas community and health care providers. ICC has created a first generation Health Information Exchange (HIE), which collects and analyzes member data. Through utilization of analytics and examination of raw data, ICC allows the health care community to make better business decisions on existing models of medical treatment and service delivery, strengthening health care infrastructure and coordination of care within the safety net system.

TABLE 12. TECHNOLOGIES TRANSFORMING HEALTH CARE DELIVERY

Type of Technological Advance	Description
Computerized Pharmacy Order Entry (CPOE)	Using automated flagging systems such as identifying dangerous drug interactions, CPOE reduces medication errors and is estimated to eliminate 200,000 adverse events and save \$1 billion per year if installed in all hospitals. ⁸⁹
Health information exchanges (HIE)	Enabling data analytics to better target and customize interventions and measure outcomes.
Electronic medical records (EMR)	While only 15–20 percent of US physicians and 20–25 percent of hospitals have adopted data systems, ⁹⁰ savings could amount to more than \$77 billion if implemented fully.
Mobile health applications (mHealth)	More than 200 million mobile healthcare applications are in use today, and expected to triple by 2012. ⁹¹ By allowing patients to control and take action on personal health data, mobile apps improve access to care interventions such as blood pressure and glucose monitoring with the convenience of consulting a hand-held device.

5. Developing multi-sector partnerships can improve our health and economic sustainability.

Improving health and health care will require a coordinated and collaborative approach.

Across the country, multi-sector partnerships are coming together to leverage their resources to develop and implement effective strategies to improve quality of life issues. Successful and sustainable initiatives span the individual, family, workplace, community and public policy approaches.

National trends and local examples of “what works” are captured in the National Strategy for Quality Improvement in Health Care⁹² and U.S. Public Health Service’s National Prevention Strategy.⁹³ From these documents, several priorities are recommended by these national task forces for prevention and health care strategies at the regional level (see Table 13).

“We are responsible for our community’s health care – as consumers, employers and neighbors.”

BOBBIE RYDER

Healthy Communities Collaborative, Hays County

TABLE 13. OVERVIEW OF KEY PRIORITIES FOR REGIONAL PREVENTION AND HEALTH CARE STRATEGIES

Prevention Services	Health Care Services
Including health criteria when engaging in decision making (e.g., regarding policy, transportation, construction)	Making care safer by reducing harm in care delivery
Developing multi-sector partnerships (e.g., business, city planning, education, health, etc.) to plan, implement and evaluate community health initiatives	Ensuring that each person and family is engaged as partners in their care
Creating environments in communities, worksites and other settings that enable healthy choices	Promoting effective communication and coordination of care
Using media and diverse settings/programs to provide people with accurate, accessible, actionable health information and connect them to important resources	Promoting the most effective prevention and treatment practices for the leading causes of mortality starting with cardiovascular disease
Uniting professionals and community representatives to utilize data to identify health needs and at-risk populations and address barriers	Making quality of care more affordable for individuals, families, employers and governments by developing and spreading new health care delivery models

Source: U.S. Department of Health and Human Services. (2011). *Report to Congress: National Strategy for Quality Improvement in Health Care*. Washington, DC.; U.S. Department of Health and Human Services: National Prevention Council. (2011). *National Prevention Strategy*. Washington, DC: Office of the Surgeon General.

Public-private partnerships bring strength in resources, numbers, diversity and relationships.

Central Texans work hard, but the current system does not always work for them. There is an urgent need to address health and health care in Central Texas. However, in addressing that need, there is an opportunity to create innovative solutions through collaboration. By working together, we have the ability to ensure that Central Texas continues to be a healthy, productive community; a “first in class” destination; and an example for the nation.

Collaboratives around the country such as the Memphis Business Group on Health, Heartland Healthcare Coalition and Mid-America Coalition on Health Care are some examples of consumers, providers, businesses, government and other stakeholders working together to focus on tackling the community’s health using a comprehensive approach.⁹⁴ In Central Texas, a number of health care institutions, organizations and agencies across multiple sectors have begun to address the region’s health needs in a holistic fashion.

“Our region is growing to become more global and diverse in its employment base.”

REVEREND JOSEPH PARKER, JR. JD, DMIN
David Chapel Missionary Baptist Church

Working together we can improve the health and economic prosperity of the region. Individual and duplicative efforts are less effective.

We need to break the cycle of cost, coverage and illness and align efforts in developing health policies, build a strong infrastructure that supports health and prevention of disease, and realign incentives that promote appropriate cost, quality and access to care that will lead to improved health (Figure 20). *These efforts will lead to achieving a vision of healthy people, healthy economy and healthy community.* Ensuring a strong infrastructure and supportive policies can strengthen the environment to bring about large-scale change to improve the region’s overall health and economic prosperity.

Texas Health Institute (THI), as the State Affiliate for The Benefit Bank of Texas (TBB-TX) is developing regional partnerships throughout the state to create an on-line system to connect low- to moderate-income Texans to worker Medicaid and other benefits. TBB-TX will provide individuals a “one stop shop” on-line portal for a multitude of services, from filing taxes and securing federal and state tax credits to applying for SNAP (food stamps), CHIP and Medicaid to completing student loan applications.

FIGURE 20. HEALTHY PEOPLE, HEALTHY ECONOMY AND A HEALTHY COMMUNITY





How Do We Get Started?

Beginning in Fall 2011, community leaders will have an opportunity to discuss and digest the information presented in this report during a series of dialogues. The focus of the dialogue sessions is to engage community leaders to envision what a model healthy Central Texas looks like and how to create it. This process will include the development of priorities and action agendas. The dialogues are an opportunity to think about how we can further collaborate across the region, leverage community assets and build on current initiatives to maximize health outcomes and other indicators of success embedded in our vision. This process will culminate in a session in early 2012 focusing on the steps our communities will take together to improve health and healthcare in Central Texas.

Every person in Central Texas has a role to play in this effort and must invest in the long term future of Central Texas – there is not a quick fix. Each and every one of us can take steps to improve our personal health and set an example for those around us. Leaders of organizations and businesses can change company culture and policy to support employee health and productivity. Health care leaders can innovate and change how they do business. Community leaders can call attention to the need for improvements and changes in policies. Policymakers can listen and change public policy to support improved health outcomes for the communities they influence – school districts, municipalities, counties, regional planning bodies.

You have already made a significant commitment to the issue by reading this document. Now identify where you fit in the picture of what is happening in Central Texas and begin to think of ways you can take steps to address the issue of health and health care in Central Texas. Find a reason to be inspired to address this issue – do you want a brighter future for your child, your company, your community? Consider the legacy you leave behind – it can make all the difference.

“It is a worthwhile effort to create a common dialogue where we can identify shared interests and align our efforts towards improving the health status of our community. We can leverage the best of what our community spirit is all about – entrepreneurial, smart, caring people – there is something really unique about our region. I’ve seen us drive change because we have a vision and then we roll up our sleeves to get it going. There is a lot of vitality here and we might have a chance at being a national example.”

KATHLEEN ANGEL

Executive Director Global Benefits and Mobility, Dell Inc.



REFERENCES

- ¹ Combs, S. (2011). *State Health Care Spending*. Texas Comptroller of Public Accounts. Retrieved from: <http://www.window.state.tx.us/specialrpt/healthcare/pdf/HealthcareReport.pdf>
- ² Centers for Disease Control and Prevention. (2009). *Behavioral Risk Factor Surveillance System (BRFSS)*. Atlanta. Accessed online: <http://www.cdc.gov/brfss/index.htm>
- ³ Davis, K., Collins, S.R., Doty, M.M., Ho, A., & Holmgren, A.L. (2005). *Health and Productivity among U.S. Workers*. The Commonwealth Fund. Retrieved from: <http://www.commonwealthfund.org/Content/Publications/Issue-Briefs/2005/Aug/Health-and-Productivity-Among-U-S-Workers.aspx>
- ⁴ Combs, S. (2011). *Gaining Costs, Losing Time: The Obesity Crisis in TX*. Texas Comptroller of Public Accounts. <http://www.window.state.tx.us/specialrpt/obesitycost/>
- ⁵ U.S. Census Bureau. (2009). *American Community Survey*. Retrieved from: www.factfinder.census.gov
- ⁶ Cutler, D.M & Lleras-Muney, A. (2006). *Education and Health: Evaluating Theories and Evidence* (NBER Working Paper No. 12352). Cambridge, MA: National Bureau of Economic Research.
- ⁷ Kaiser Family Foundation. (2011). Employer Health Insurance Costs and Worker Compensation. *Snapshots: Health Care Costs*. Retrieved from: <http://www.kff.org/insurance/snapshot/Employer-Health-Insurance-Costs-and-Worker-Compensation.cfm>
- ⁸ The Commonwealth Fund. (2007). *Aiming Higher: Results from a State Scorecard on Health System Performance*. http://www.commonwealthfund.org/usr_doc/StateScorecard.pdf
- ⁹ Seton Healthcare Family. (2009). *Analysis by Seton Family of Hospitals, 2009*. Presentation of University Medical Center Brackenridge.
- ¹⁰ Skinner, J. & Fisher, E. S. (2010). Reflections on Geographic Variations in U.S. Health Care. *The Dartmouth Atlas of Health Care*.
- ¹¹ Kelley R. (2009). *White Paper: Where Can \$700 billion in Waste Be Cut Annually from the U.S. Healthcare System?* Thomson Reuters.
- ¹² Wilper, A.P., Woolhandler, S., Lasser, K.E., McCormick, D., Bor, D.H., & Himmelstein, D.U. (2009). Health Insurance and Mortality in Adults. *American Journal of Public Health* 99: 2289-2295.
- ¹³ Way, S., Carrol, B., Susskind, A., & Leng, J. (2011). *The Impact of Health Insurance on Employee Job Anxiety, Withdrawal Behaviors, and Task Performance*. Cornell University. Retrieved from: <http://www.hotelschool.cornell.edu/research/chr/pubs/reports/abstract-15379.html>
- ¹⁴ Anderson, G. (2004). *Chronic Conditions: Making the Case for Ongoing Care*. Baltimore, MD: John Hopkins University.
- ¹⁵ Levi, J., Segal, L.M., & Juliano, C. (2009). *Prevention for a Healthier America: Investments in Disease Prevention Yield Significant Savings, Stronger Communities*. Washington, DC: Trust for America's Health. Retrieved from: <http://healthyamericans.org/reports/prevention08/Prevention08.pdf>
- ¹⁶ National Association of Community Health Centers. (2007). *Access Denied: America's Medically Disenfranchised*. Retrieved from: http://www.graham-center.org/PreBuilt/Access_Denied.pdf
- ¹⁷ Doctor Link. (2011). New Study Quantifies Economic Benefits of Expanding Academic Medicine. *Seton Healthcare Family*. Retrieved from: <http://doctors.seton.net/Announcements/NewStudyQuantifiesEIF77.asp>
- ¹⁸ Workforce Solutions. (2010). *State of the Workforce: Austin-Round Rock Metropolitan Statistical Area (MSA)*. Retrieved from: http://www.ci.cedar-park.tx.us/cp/resources/1/2010_State_of_Workforce_Austin-RoundRock_MSA.pdf
- ¹⁹ Texas Department of State Health Services. (2008). *Deaths of Texas residents*. Retrieved from: <http://soupsfin.tdh.state.tx.us/death10.htm>.
- ²⁰ World Health Organization. (2005). *Widespread Misunderstandings about Chronic Disease – and the Reality*. Fact Sheet. Retrieved from: http://www.who.int/chp/chronic_disease_report/media/Factsheet2.pdf
- ²¹ County Health Rankings. (2011). Texas. Retrieved from: <http://www.countyhealthrankings.org/texas/health-factors-rankings>
- ²² County Health Rankings. (2011). Texas. Retrieved from: <http://www.countyhealthrankings.org/texas/health-factors-rankings>
- ²³ Combs, S. (2011). *Gaining Costs, Losing Time: The Obesity Crisis in TX*. Texas Comptroller of Public Accounts. <http://www.window.state.tx.us/specialrpt/obesitycost/>
- ²⁴ Truchard, J. (2011, July 24). The Picture of Health. *Texas CEO Magazine*. Retrieved from: <http://texasceomagazine.com/>

- ²⁵ Combs, S. (2011). *Gaining Costs, Losing Time: The Obesity Crisis in TX*. Texas Comptroller of Public Accounts. <http://www.window.state.tx.us/specialrpt/obesitycost/>
- ²⁶ National Business Group on Health. (2009). *Childhood Obesity: It's Everybody's Business*. Washington, DC: National Business Group on Health.
- ²⁷ Marder, W. & Chang, S. (2005). *Childhood Obesity: Costs, Treatment Patterns, Disparities in Care, and Prevalent Medical Conditions*. Thomson Medstat Research Brief.
- ²⁸ Centers for Disease Control and Prevention. (2011). *Basics of Childhood Obesity*. Atlanta. Retrieved from: <http://www.cdc.gov/obesity/childhood/basics.html>
- ²⁹ Geier, A.B., Foster, G.D., Womble, L.G., et al. (2007). The Relationship between Relative Weight and School Attendance among Elementary Schoolchildren. *Obesity* 15(8): 2157-2161.
- ³⁰ Story, M., Kaphingst, K.M., Robinson-O'Brien, R., & Glanz, K. (2008). Creating Healthy Food and Eating Environments: Policy and Environmental Approaches. *Annual Review of Public Health* 29:253-272.
- ³¹ Gordon-Larsen, P., Nelson, M.C., Page, P., & Popkin, B.M. (2006) Inequality in the Built Environment Underlies Key Health Disparities in Physical Activity and Obesity. *Pediatrics* 117: 417-424.
- ³² U.S. Census Bureau. (2009). *American Community Survey*. Retrieved from: www.factfinder.census.gov
- ³³ County Health Rankings. (2011). Texas. Retrieved from: <http://www.countyhealthrankings.org/texas/health-factors-rankings>
- ³⁴ Cutler, D.M & Lleras-Muney, A. (2006). *Education and Health: Evaluating Theories and Evidence* (NBER Working Paper No. 12352). Cambridge, MA: National Bureau of Economic Research.
- ³⁵ Cohen, R. (2001). The Impacts of Affordable Housing on Health: A Research Summary. *Insights from Housing Policy Research*. Center for Housing Policy. Retrieved from: http://www.nhc.org/media/files/Insights_HousingAndHealthBrief.pdf
- ³⁶ Jacobs, D.E., Wilson, J., Dixon, S.L., Smith, J., & Evens, A. (2009). The Relationship of Housing and Population Health: A 30-Year Retrospective Analysis. *Environ Health Perspectives* 117:597-604.
- ³⁷ Dunkelberg, A., Villanueva, C. (2011). New Census Data Show Texas' Uninsured Rate Tops Nation. Center for Public Policy Priorities. Retrieved from: http://www.cppp.org/files/091311_PovertyDay_PolicyPage_HealthIns.pdf
- ³⁸ Brendel P. (2010). Health Care Top Concern, Local Small-business Owners Tell U.S. Sen. Cornyn. *Community Impact Newspaper*. Retrieved from: <http://impactnews.com/central-austin/293-recent-news/7127-health-care-top-concern-local-small-business-owners-tell-us-sen-cornyn>
- ³⁹ Texas CEO Magazine. (2011, July 24). The Road to Wellville: A C-Suite Discourse on the Complexities of Employee Wellness. *Texas CEO Magazine*. Retrieved from: <http://texasceomagazine.com/features/the-road-to-wellville/>
- ⁴⁰ Combs, S. (2011). *State Health Care Spending* Texas Comptroller of Public Accounts. Retrieved from: <http://www.window.state.tx.us/specialrpt/healthcare/pdf/HealthcareReport.pdf>
- ⁴¹ Trust for America's Health. (2009). *Prevention for a Healthier America: Investments in Disease Prevention Yield Significant Savings, Stronger Communities*. Retrieved from: <http://healthyamericans.org/reports/prevention08/Prevention08.pdf>
- ⁴² Kaiser Family Foundation. (2011). Employer Health Insurance Costs and Worker Compensation. *Snapshots: Health Care Costs*. Retrieved from: <http://www.kff.org/insurance/snapshot/Employer-Health-Insurance-Costs-and-Worker-Compensation.cfm>
- ⁴³ Kaiser Family Foundation. (2009). Texas: Employer-based Health Premiums. *State Health Facts*. Accessed online: <http://www.statehealthfacts.org/>
- ⁴⁴ Texas Department of Insurance. (2006). *State Planning Grant Project*. Retrieved from: <http://www.tdi.state.tx.us/reports/life/documents/spgint061.pdf>
- ⁴⁵ Kaiser Family Foundation. (2009). *Health Insurance Coverage of Nonelderly 0-64, States (2008-2009), U.S.* Retrieved from: <http://www.statehealthfacts.org/comparable.jsp?ind=126&cat=3>
- ⁴⁶ U.S. Department of Health and Human Services. (2011). *Find Shortage Areas: MUA/P by State and County*. Retrieved from: <http://muafind.hrsa.gov/index.aspx>
- ⁴⁷ Seton Healthcare Family. (2009). *Analysis by Seton Family of Hospitals, 2009*. Presentation of University Medical Center Bracklenridge.
- ⁴⁸ Kaiser Commission on Medicaid and the Uninsured. (2011). *Research Brief: Insurance Coverage and Access to Care in Primary Care Shortage Areas*. Retrieved from: <http://www.kff.org/insurance/upload/8161.pdf>
- ⁴⁹ Bisgaier, J., Rhodes, K.V. (2011). Auditing Access to Specialty Care for Children with Public Insurance. *New England Journal of Medicine* 364(24):2324-33.

- ⁵⁰ Combs, S. (2011). *State Health Care Spending* Texas Comptroller of Public Accounts. Retrieved from: <http://www.window.state.tx.us/specialrpt/healthcare/pdf/HealthcareReport.pdf>
- ⁵¹ The Commonwealth Fund. (2007). *Aiming Higher: Results from a State Scorecard on Health System Performance*. http://www.commonwealthfund.org/usr_doc/StateScorecard.pdf
- ⁵² Schoen, C., Guterman, S., Shih, A., et al. (2007). Bending the Curve: Options for Achieving Savings and Improving Value in US Health Spending. *The Commonwealth Fund*. Retrieved from: http://www.commonwealthfund.org/usr_doc/Schoen_bendingthecurve_1080.pdf?section=4039
- ⁵³ Averill, R.F., Goldfield, N.I., Hughes, J.S., Eisenhandler, J., & Vertrees, J.C. (2009). Developing a Prospective Payment System based on Episodes of Care. *Journal of Ambulatory Care Management* 32(3):241-51.
- ⁵⁴ Bloom, N., Propper, C., Seiler, S., & Van Reenen. (2010). *The Impact of Competition on Management Practices in Public Hospitals* (Working Paper #16032). Cambridge, MA: National Bureau of Economic Research.
- ⁵⁴ Kessler, D.P., & McClellan, M.B. (1999). *Is Hospital Competition Socially Wasteful?* (Working Paper #7266). Cambridge, MA: National Bureau of Economic Research.
- ⁵⁶ Skinner, J. & Fisher, E. S. (2010). Reflections on Geographic Variations in U.S. Health Care. *The Dartmouth Atlas of Health Care*.
- ⁵⁷ Levi, J., Segal, L.M., & Juliano, C. (2009). *Prevention for a Healthier America: Investments in Disease Prevention Yield Significant Savings, Stronger Communities*. Washington, DC: Trust for America's Health. Retrieved from: <http://healthyamericans.org/reports/prevention08/Prevention08.pdf>.
- ⁵⁸ Wilper, A.P., Woolhandler, S., Lasser, K.E., McCormick, D., Bor, D.H., & Himmelstein, D.U. (2009). Health Insurance and Mortality in Adults. *American Journal of Public Health* 99: 2289-2295.
- ⁵⁹ Stewart, W.F., Ricci, J.A., Chee, E., & Morganstein, D. (2003). Lost Productive Work Time Costs from Health Conditions in the United States: Results from the American Productivity Audit. *Journal of Occupational Environmental Medicine* 45: 1234-1246.
- ⁶⁰ Aldana, S.G. (2001). Financial Impact of Health Promotion Programs: A Comprehensive Review of the Literature. *American Journal of Health Promotion* 15: 296-320.
- ⁶¹ Way, S., Carrol, B., Susskind, A., & Leng, J. (2011). *The Impact of Health Insurance on Employee Job Anxiety, Withdrawal Behaviors, and Task Performance*. Cornell University. Retrieved from: <http://www.hotelschool.cornell.edu/research/chr/pubs/reports/abstract-15379.html>
- ⁶² Parks, K.M., & Steelman, L.A. (2008). Organizational Wellness Programs: A meta-analysis. *Journal of Occupational Health Psychology* 13: 58-68.
- ⁶³ Carnethon, M., Whitsel, L.P., Franklin, B.A., & Kris-Etherton, P. (2009). Statement from the American Heart Association Worksite Wellness Programs for Cardiovascular Disease Prevention: A Policy. *Circulation* 120:1725-1741.
- ⁶⁴ Kaiser Family Foundation and Health Research & Educational Trust. (2010). *Employer Health Benefits: 2010 Annual Survey*. Retrieved from: <http://ehbs.kff.org/pdf/2010/8085.pdf>
- ⁶⁵ National Business Group on Health. (2007). *Survey: Employees and their Health Benefits: Perceptions, Values and Trade-Offs*. Retrieved from: <http://www.wbgh.org/pressrelease.cfm?ID=87>
- ⁶⁶ Kaiser Family Foundation and Health Research & Educational Trust. (2010). *Employer Health Benefits: 2010 Annual Survey*. Retrieved from: <http://ehbs.kff.org/pdf/2010/8085.pdf>
- ⁶⁷ Kaiser Family Foundation and Health Research & Educational Trust. (2010). *Employer Health Benefits: 2010 Annual Survey*. Retrieved from: <http://ehbs.kff.org/pdf/2010/8085.pdf>
- ⁶⁸ National Cooperative Business Association. (2011). *Co-op Sectors: About Co-ops*. Retrieved from: <http://www.ncba.coop/ncba/about-co-ops/co-op-sectors/146-healthcare>
- ⁶⁹ Anderson, G. (2004). *Chronic Conditions: Making the Case for Ongoing Care*. Baltimore, MD: John Hopkins University.
- ⁷⁰ Lambrew, J.M. (2007). A Wellness Trust to Prioritize Disease Prevention. Washington, D.C.: *Brookings Institution*. Retrieved from: http://www.brookings.edu/papers/2007/~media/Files/rc/papers/2007/04useconomics_lambrew/04useconomics_lambrew.pdf
- ⁷¹ Texas CEO Magazine. (2011, July 24). The Road to Wellville: A C-Suite Discourse on the Complexities of Employee Wellness. *Texas CEO Magazine*. Retrieved from: <http://texasceomagazine.com/features/the-road-to-wellville/>
- ⁷² Levi, J., Segal, L.M., & Juliano, C. (2009). *Prevention for a Healthier America: Investments in Disease Prevention Yield Significant Savings, Stronger Communities*. Washington, DC: Trust for America's Health. Retrieved from: <http://healthyamericans.org/reports/prevention08/Prevention08.pdf>

- ⁷³ National Institute for Health Care Management. (2011). *Understanding U.S. Health Care Spending* NICHM Foundation Data Brief.
- ⁷⁴ Kwoh, L. (2011). As health care costs rise more companies invest in fitness programs. *The Star Ledger*. Accessed online: http://www.nj.com/business/index.ssf/2011/07/corporate_fitness_health.html
- ⁷⁵ Leatherman, S., Berwick, D., Iles, D., Lewin, L.S., Davidoff, F., Thomas, N., & Bisognano, M. (2003). The business case for quality: case studies and an analysis. *Health Affairs* 22: 17-30.
- ⁷⁶ National Business Group on Health. (2011). *Moving Science into Coverage: An Employer's Guide to Preventative Services*. Retrieved from: <http://www.businessgrouphealth.org/preventive/>
- ⁷⁷ Lightwood, J.M. & Glantz, S.A. (1997). Short-Term Economic and Health Benefits of Smoking Cessation—Myocardial Infarction and Stroke. *Circulation* 96: 1089-1096.
- ⁷⁸ Centers for Disease Control and Prevention. (2009). *Behavioral Risk Factor Surveillance System (BRFSS)*. Retrieved from: <http://www.cdc.gov/brfss/index.htm>.
- ⁷⁹ Texas CEO Magazine. (2011, July 24). The Road to Wellville: A C-Suite Discourse on the Complexities of Employee Wellness. *Texas CEO Magazine*. Retrieved from: <http://texasceomagazine.com/features/the-road-to-wellville/>
- ⁸⁰ Saelens, B.E., et al. (2003). Neighborhood Based Differences in Physical Activity: An Environment Scale Evaluation. *American Journal of Public Health* 93:1552-1558.
- ⁸¹ Robert Wood Johnson Foundation. (2011). *The Power of Trails for Promoting Physical Activity in Communities*. Retrieved from: <http://www.rwjf.org/files/research/alrbriefpoweroftrails.pdf>
- ⁸² Robert Wood Johnson Foundation. (2011). *The Potential of Safe, Secure and Accessible Playgrounds to Increase Children's Physical Activity*. Retrieved from: <http://www.rwjf.org/files/research/alrbriefsafeplaygrounds.pdf>
- ⁸³ Morland, K., et al. (2002). The Contextual Effect of the Local Food Environment on Residents' Diets: The Atherosclerosis Risk in Communities Study. *American Journal of Public Health* 92: 1761-1767.
- ⁸⁴ Public Health Law & Policy. (2007). *Economic Development and Redevelopment: A Toolkit on Land Use and Health*. Retrieved from: http://www.healthyplanning.org/ecdev_toolkit/EcDevToolkit.
- ⁸⁵ Brendel, P. Heidrick, R., & Seton, U.T. (2010, March 26) Lay Foundations for Austin Medical School. *Community Impact Newspaper*.
- ⁸⁶ Doctor Link. (2011). New Study Quantifies Economic Benefits of Expanding Academic Medicine. *Seton Healthcare Family*. Retrieved from: <http://doctors.seton.net/Announcements/NewStudyQuantifiesEIF77.asp>
- ⁸⁷ National Association of Community Health Centers. (2007). *Access Denied: America's Medically Disenfranchised*. Retrieved from: http://www.graham-center.org/PreBuilt/Access_Denied.pdf
- ⁸⁸ Rauber, C. (2011, April 12). CalPERS says it saved \$15M with ACO pilot program, will likely expand it. *San Francisco Business Times*.
- ⁸⁹ Hillestad, R., Bigelow, J., Bower, A., Girosi, F., Meili, R., Scoville, R., & Taylor, R. (2004). Can Electronic Medical Record Systems Transform Health Care? Potential Health Benefits, Savings, and Costs. *Health Affairs* 24: 1103-1117.
- ⁹⁰ Taylor, H., & Leitman, R. (2002). European Physicians, Especially in Sweden, Netherlands, and Denmark, Lead U.S. in Use of Electronic Medical Records. *Harris Interactive* 2. Retrieved from: http://www.harrisinteractive.com/news/newsletters_healthcare.asp.
- ⁹¹ Lewis, N. (2011). Mobile Health Apps To Triple By 2012. *Information Week*. Retrieved from: <http://www.informationweek.com/news/healthcare/mobile-wireless/229000130>
- ⁹² U.S. Department of Health and Human Services. (2011). *Report to Congress: National Strategy for Quality Improvement in Health Care*. Washington, DC. Retrieved from: <http://www.healthcare.gov/center/reports/nationalqualitystrategy032011.pdf>
- ⁹³ U.S. Department of Health and Human Services: National Prevention Council. (2011). *National Prevention Strategy*. Washington, DC: Office of the Surgeon General. Retrieved from: <http://www.healthcare.gov/center/councils/nphpphc/strategy/report.pdf>
- ⁹⁴ Webber, A., & Mercure, S. (2010). Improving Population Health: The Business Community Imperative. *Preventing Chronic Disease* 7(6), 1-6.



CENTRAL HEALTH

Central Health's vision is that Central Texas
is a model healthy community.



The Austin Area Research Organization is
a membership organization of 90 business and
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and social well being of the Central Texas area.

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