CODE RED

The Critical Condition of Health in Texas

The Report

Problem: Texas has the highest percentage of uninsured in the nation.

Solution: Now is the time for Texas to take bold steps.

[Preface]

On behalf of the entire Task Force on Access to Health Care in Texas, we want to make a few points as a preface to the Report. First, the Task Force is eclectic and brings diverse backgrounds, experiences and expertise to bear on the problems associated with the uninsured and underinsured in Texas. Indeed, this diversity enriched the deliberations and recommendations of the Task Force, who served without compensation. Second, while diverse with regards to expertise, etc., the Task Force is singular with regard to the importance and magnitude of the problem that inadequate health insurance poses, not only to the physical and mental health of the residents of Texas, but also to the financial well being of the state.

The Task Force is unanimous in its emphasis that this is not a problem of the future, but one that is already here. Third, the Task Force feels that the Report is, in so far as possible, an evidence-based, objective, non-partisan effort with six well prepared commissioned papers and an independent review by a group of experts.
The Task Force recognizes that long-term solutions to the challenges of our health system will require a national effort and new national approaches. However, its charge is to confront the challenges within Texas.

The 10 academic health institutions in Texas that provided support for the Report exerted no control over the activities of the Task Force or its conclusions and recommendations. The views of the Task Force represent those of the individual members and not those of the entities and institutions of which they are a part. And finally, the Task Force recognizes that some of its recommendations will be controversial and trigger debate. We hope that such debate occurs. It will only serve to further education about the nature and depth of the problem, and we hope it leads to implementation of the recommendations.

A major driver leading to the increasing rates of uninsured and underinsurance is the rising cost of health care. Throughout the Report, the Task Force underscores the responsibility all health professionals and providers have in addressing this basic issue. Texas leads the nation in the percentage of its residents who are uninsured. The Task Force hopes that Texas will also be a leader in developing solutions to this challenge.

Neal Lane, Chairman
Jack Stobo, Vice Chair
April 2006

[Charge to Task Force]

Access to Health Care in Texas: Challenges of the Uninsured and Underinsured

Approximately one in four Texans does not have health insurance. In some portions of the state, one in three people is uninsured. Although the provision of health care for this population is often characterized as indigent care, the population is extremely heterogeneous with only a portion of the population truly living in poverty. As well-described in the recent series of six reports from the Institute of Medicine, the population includes a large proportion of working individuals, who can support themselves satisfactorily but cannot afford the rapidly rising cost of health insurance. In this society, in which health insurance is most commonly employer-based, those who work for organizations with few employees or who move from employer to employer often cannot maintain health insurance coverage. A significant portion of the population receives coverage through Medicaid or through the State Children's Health Insurance Program (SCHIP). These individuals often have limited access to care. Limited access is available to migratory farm workers, undocumented aliens, individuals between jobs and members of certain ethnic and racial groups.

In Texas, care for the medically indigent is largely a responsibility of individual counties while the state has a major financial commitment in support of Medicaid and SCHIP. Eligibility for county-financed care varies widely, with many counties providing care only for those with extremely low or no income. On the other hand, certain communities such as those in Dallas, Houston, Galveston, San Antonio and Austin must finance and provide care for significant numbers of individuals coming from other parts of the state.

Institute of Medicine studies have clearly documented the negative impact of the uninsured on the health of individuals and families; the negative economic consequences of inadequate health care for medically indigent patients on their communities; the extraordinary stresses imposed upon health providers, particularly hospitals who are providing increasing amounts of uncompensated care; and the overall cost to society of a system which focuses on providing emergency care rather than primary care for the medically indigent. A combination of demographic changes and the continued rise in health care costs suggests that these challenges will progressively increase for the foreseeable future.

Because of the current importance and impending challenges confronting Texas in dealing with the problem of medically indigent individuals, the 10 major academic health institutions in the state are sponsoring a Task Force to identify strategies for confronting medically indigent care in Texas. These institutions include the six health campuses of The University of Texas System, Baylor College of Medicine, Texas A & M, North Texas State and Texas Tech. The Task Force consists of 19 individuals selected for their expertise and perspective in regard to the problem of indigent health care in Texas. Members of the Task Force serve as individuals and do not represent any organizations

or special interest. The Task Force and its staff will collect data, much of which will be based on previous high-quality analyses of the various issues supplemented by substantial primary information-gathering by the Task Force and its staff. The Task Force will hear from individuals knowledgeable about the issues; members of the staff may interview other important sources. The analysis is to be an objective evidence-based consideration without politically partisan or advocacy orientation. The intent is to provide a high-quality analysis available to policymakers, interested groups and organizations and the public. The full report is expected to require 12-15 months for preparation, although the Task Force will be urged to provide some preliminary insights in 8-10 months. The final report will be subject to anonymous peer review by other experts in the field, in order to validate the quality of the analysis from additional sources. Financial support for the project will be derived from the sponsoring institutions supplemented by not-for-profit foundations.

The Task Force on Access to Health Care in Texas is charged with the following tasks:

- to assess the current magnitude of the problem of the uninsured and underinsured in Texas, including populations at risk, the cost to providers, local and state governments, and impacts upon health.
- to evaluate the effects upon other aspects of society, including social and economic impact.
- to identify the trends and the magnitude, scope and direction of the problem of medically indigent care for the state.
- to examine alternative strategies which might be employed to address the problems of the uninsured and underinsured in Texas.*

The Task Force will provide an evidence-based analysis of the advantages and disadvantages of each strategy for Texas, with special attention to costs.

*Such strategies might include, but are not limited to, considerations of such issues as regional or state responsibility for indigent health care; mechanisms for enhancing federal contributions to indigent care; options related to small employer subsidization of health care premiums; impact of tiered benefits packages; creative public/private partnerships to enhance care or to increase prevention; the role of electronic medical records and telemedicine; the patient identifier as a device that might increase the efficiency of care; the impact of changes in federal policies for care of the dual-eligible (Medicaid/Medicare), etc.

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ACCESS TO HEALTH CARE IN TEXAS: CHALLENGES OF THE UNINSURED AND UNDERINSURED

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Executive Summary

Texas faces an impending crisis regarding the health of its population, which will profoundly influence the state's competitive position nationally and globally. The health of Texas—economically, educationally, culturally and socially—depends on the physical and mental health of its population. Quality of life for individual Texans and the communities in which they live depends critically upon health status. Texas has a rapidly growing population, which has an increasing propensity to obesity, hypertension, diabetes, heart disease and cancer (Murdock et al., 2003). At the same time, 25.1 percent of its population is without health insurance, which is the highest in the nation (15.3 percent) and growing (U.S. Census Bureau, 2005). The increasing discrepancy between growing health needs and access to affordable health insurance coverage creates the conditions for a "perfect storm." Poor health negatively impacts education, and educational attainment is directly related to health status (see Appendix E).*

Increasing numbers of uninsured individuals place extraordinary economic and service burdens upon health care providers, hospitals, trauma centers and the communities which provide funding for health services. Fiscal pressures on taxpayers in communities that provide care for rapidly increasing numbers of uninsured individuals continue to grow and compete negatively with other community needs. These pressures are exacerbated by reductions in reimbursements to hospitals, physicians and other providers in the Medicaid and Medicare programs and by the fact that large public and nonprofit hospitals located in central cities often become the de facto provider of services for the uninsured from broad geographic regions.

The Task Force

In view of these serious challenges, 10 academic health institutions in Texas (Baylor College of Medicine, Texas Tech, Texas A&M, North Texas and the six health institutions of The University of Texas System) created a Task Force on these issues. Task Force members also included small and large business employees, health care providers, insurers and consumers. All represented their own personal perspective and did not represent groups or organizations with which they are associated. Financial support for the project came solely from the academic health institutions.

The Task Force was chaired by Neal Lane, Malcolm Gillis University Professor and Senior Fellow at the James A. Baker III Institute for Public Policy at Rice University, who has a long and distinguished career in science and public policy, but whose personal activities and programs at Rice University do not involve health care delivery. Jack Stobo, President of the University of Texas Medical Branch at Galveston, served as the Task Force vice chair. During its proceedings, the Task Force conducted five plenary meetings in various locations across the state and a series of subcommittee meetings.

***Appendices are in a separate volume.**

The Task Force was unique in many ways. It was the first broad-based group of its kind to be created in Texas, whose membership was not determined by governmental or political considerations. The project has been predicated upon an objective, evidence-based analysis, which depended heavily upon commissioned papers from experts providing in-depth analysis of relevant subjects. This report, which represents a consensus of the Task Force, was subject to independent expert peer review.

Findings

After reviewing evidence presented, the Task Force concluded that in the absence of vigorous initiatives to deal with the increasing number of individuals without health insurance, the state will be at significant risk of a substantial decline in the health and productivity of its citizens and the vitality of its economy. This could result in the following conditions:

- An unhealthy, poorly educated workforce resulting in lower productivity and reduced state economic power;
- The loss of many important community institutions including emergency rooms and hospitals;
- Degradation in the quality and accessibility of health care for all Texans;
- Budget crises, for both the state and particularly in high-population counties; and
- A negative image, which will decrease business retention, investment, development and workforce recruitment.

The Specific Findings of the Task Force Include:

- The overall health status of Texans is poor, particularly in comparison to other states, and is likely to decline further without major and immediate interventions.
- Texas has the highest proportion of uninsured individuals in the United States, and this has a major impact on the health and economy of the state.
- Strategies to control the cost of health insurance or to subsidize payments by employers and employees are needed, particularly for those working for small employers.
- Current trends in the delivery of health care will exacerbate problems associated with an increasing number of uninsured Texans.
- Emergency rooms provide an important but expensive and inefficient method for providing care to the uninsured and underinsured.
- Texas communities are making great efforts to improve access to health care, particularly for the uninsured.
- Expansion and strengthening of ambulatory (outpatient) services is an essential and necessary step to achieve high-quality, cost-effective care for the uninsured and those on Medicaid and SCHIP in Texas.
- The continuing rise in Medicaid and health care expenditures in Texas is unsustainable and has deleterious effects on the ability to fund other critical state needs.
- The State of Texas has not taken full advantage

of federal matching funds for health care to the uninsured.

- The current county-based approach to health care in Texas is inadequate and inequitable.
- There is a significant shortage of health care professionals in Texas, and this limits the capacity to provide care, particularly to the uninsured and Medicaid recipients.
- Educational attainment and health are inexorably linked in Texas.
- Care of people with mental illness remains a major unresolved problem for Texas.
- The solution to adequate access to health care for the uninsured and underinsured is a shared responsibility where partnerships are crucial.

The Task Force further concluded that critical solutions to the challenge of the uninsured must arise out of a shared responsibility for the problem by a broad diversity of participants, including health care providers, patients and their advocates, policy makers, businesses, community organizations, and state and federal governments. The Task Force also determined that additional resources, and the more efficient and effective use of resources, will be required to provide appropriate services to the uninsured. These must include methods for improving the efficiency and effectiveness of health care as well as efforts to control the rate of increase in overall health care costs.

Task Force Recommendations

The Task Force outlined 10 major recommendations and 15 sub-recommendations to improve access to health care and insurance coverage in Texas. The recommendations address universal access, areas the state should fund, methods to obtain more funding, access and coverage experiments, disease management, electronic health records and virtual care coordination, health care providers, education and health, health research and cost containment, and public health initiatives.

Recommendation 1: Texas should adopt a principle that all individuals living in Texas should have access to adequate levels of health care.

Recommendation 2: Texas should provide more adequate resources and aggressively seek more efficient and effective methods to support health care to the indigent and uninsured with the goal of reducing rising health care costs.

2.1: Texas should authorize and encourage efforts to move indigent health care from a county-based model to a model based on regional multi-county health districts, while increasing the statewide federal poverty level (FPL) to 100 percent from 21 percent for indigent care responsibility in Texas counties.

2.2: Texas should redouble its efforts to aggressively pursue Medicaid and other federal reimbursement programs for which a state investment will result in substantial federal matching and supplementary reimbursements.

2.3: The state should develop and adopt tax policies and initiatives that encourage and enable employers (especially small employers) to provide health insurance to their employees.

2.4: State and local governments should give preferential treatment to contractors and subcontractors who offer health care coverage for their employees. Those seeking funding through the Texas Enterprise Fund and similar public programs should be included in this requirement.

2.5: Texas leadership should actively work with federal officials to maximize opportunities for initiatives and new policies expressly intended to provide for the most efficient delivery of health care services to broader numbers of uninsured individuals living in Texas.

Recommendation 3: A Quality Assurance Fee (called a provider tax in some states) of 3 percent should be assessed on revenues of all hospitals and free standing surgery centers in order to obtain a federal match to enhance overall finances for provider reimbursement and enhancement of the quality and efficiency of health care to the uninsured.[1]

Recommendation 4: The state should significantly increase its capacity and commitment to conduct experiments in health care delivery and funding.

4.1: Experimentation with employer premium subsidies should be undertaken with the use of Disproportionate Share monies, Medicaid funds, and other federal programs.

4.2: Health care providers must work to improve the quality and efficiency of care provided to the uninsured and underinsured and, in collaboration with community partners, to assist patients so that they can better navigate the health care system.

4.3: State and federal laws on emergency medical treatment and active labor act (EMTALA) as well as their interpretation by CMS, should be clarified so that individuals who are non-emergent in emergency rooms may be more quickly referred to ambulatory sites if access to the ambulatory site is assured.

Recommendation 5: The concept of virtual care coordination for the uninsured (including those patients in a structured system of care) should be developed by local communities and by the Texas Health and Human Services Commission.

Recommendation 6: Health care institutions and other providers must contribute to increasing community-based ambulatory care, which includes integrating the latest developments in disease management and other cost-effective models of health care delivery that seek to improve the quality of patient care while decreasing the cost of care.

6.1: Behavioral health care (both mental health and substance abuse) services should be accessible to all Texans with mental illness, and additional public funding should be appropriated.

Recommendation 7: Texas must increase investment in the education and training of health professionals who will provide significant amounts of care to the uninsured and underinsured.

7.1: Texas should increase the number of physicians annually graduating from its medical schools by 20 percent over the next decade with special emphasis upon creating a workforce representative of the state population.

7.2: Texas should expand medical school loan repayment programs for graduates of Texas medical schools working in Texas to include up to 500 physicians per year. One-third of student debt up to $35,000 per year should be forgiven for each year of service in a public hospital or in a clinic in which the patient population equals or exceeds

[1]One dissenting opinion on this recommendation, Mr. Richard Johnson. (See Appendix K.)

50 percent Medicaid and uninsured patients.

7.3: State support of medical residency programs should allow an increase in residency positions by 600 per biennium for the next decade. Since the average residency is four years in duration, this would increase the number of physicians graduating from residency programs by 750 per year or by 50 percent annually by 2017.

7.4: Texas should increase funding to support 2,000 more undergraduate nursing students, approximately 50 percent of the eligible applicants who have been denied admission, and 200 faculty members necessary to train them. An estimated $25 million per biennium in state General Revenue would need to be added to the funding formulas to reflect the increase in nursing student enrollment, and an additional $30 million in additional General Revenue would be needed to cover the balance of costs related to the additional faculty members.

7.5: The state should continue to provide resources to assist community health centers to qualify for federal support and modify reimbursement methods to reflect multidisciplinary team care. Hospitals, medical schools, nursing schools and other health care provider organizations should work closely with community groups to provide adequate staffing for federally qualified health centers, with an emphasis on cost-effective programs, including disease management programs and community public health programs.

7.6: The Task Force recommends that efforts be undertaken to ensure that each physician provide a fair and reasonable amount of care for Medicaid, Medicare, and uninsured patients, as well as share the responsibility of being on call to emergency rooms.

Recommendation 8: The Task Force recommends implementation of an integrated approach to school health including an emphasis on nutrition, exercise, dental health, and disease management of such problems as asthma. It recommends an expansion of the School Breakfast Program, that Texas schools increase their physical activity requirements to 60 minutes a day, and that they adopt asthma management education for affected children and support staff.

Recommendation 9: Academic health institutions, state and local governments, and communities, foundations, and the private sector should support the development of health-science research programs to study cost-effective health care and other characteristics of a high-quality and efficient health system.

Recommendation 10: Texas should adequately invest in public health programs (including research and community health) at the state and local levels.

Conclusion

Increasing numbers of individuals without health insurance coverage or with inadequate coverage is a significant and continuing concern for the country and a major policy challenge in Texas. State and local leaders must take bold steps to address this problem of epidemic proportions to protect and assure the economic vitality and health of Texas. As the population of Texas dramatically increases in the next 20 years, so will the number of uninsured and potentially their percentage in the population, if immediate and bold measures are not taken to address this challenge. An increase in the uninsured population would negatively impact the state's economy and make Texas even less appealing to businesses that will be affected by high health insurance rates.

[Chapter One]

Introduction

The number of Americans without health insurance coverage has climbed steadily in the past 25 years (Kronick & Gilmer, 1999). According to statistics from the U.S. Census Bureau, there were 46 million uninsured Americans or 15.7 percent of the population in 2004 (U.S. Census Bureau, 2005). If this problem is not addressed, the number of uninsured is predicted to reach 56 million by 2013. Eighty-two million people, one-third of the non-elderly U.S. population, were without health insurance coverage for some or all of 2002-2003 (Stoll, 2004). This increase has occurred regardless of national economic conditions, increasing during both periods of economic expansion and downturns. The social, health and economic consequences of having a relatively large population without health insurance coverage are substantial. For example, uninsured children and adults are unable to access needed medical care, and they experience poorer health outcomes. Many families also face financial risks when one or more family members are uninsured. The quality and availability of health care services are lower in communities with a relatively large uninsured population because local health care systems and providers are affected financially by having to provide uncompensated care (IOM, 2004).

One of the driving forces behind the escalating numbers of the uninsured is health care costs. Employer-sponsored health insurance coverage decreased over the last five years due to double digit health insurance premium increases (Gabel et al., 2004). Nine million fewer Americans under age 65 were covered by employer-sponsored insurance in 2003 compared to 2001 (Strunk & Reschovsky, 2004).

The Problem in Texas

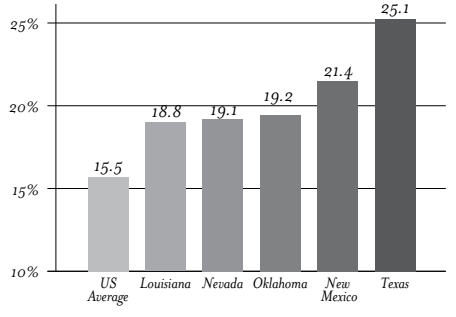
Texas leads the nation in the percentage of the population that is uninsured, with 25.1 percent of Texans uninsured in 2004 (U.S. Census Bureau, 2005). Figure 1 shows the percentage of uninsured persons for the five states with the highest rates. This affects all Texans, who pay an estimated $1,551 annually in higher insurance premiums for a family of four (Families USA, 2005). Furthermore, about 43 percent (8.5 million) of non-elderly Texans were without coverage for all or part of 2002-2003 (Stoll, 2004).

The proportion of the population without health insurance coverage varies substantially across Texas counties and local communities. In 11 counties near Mexico (Cameron, Dimmit, Hidalgo, Kinney, Maverick, Starr, Val Verde, Webb, Willacy, Zapata and Zavala), there is an average uninsured rate of 34.6 percent. Twenty-eight percent of the residents of Houston (the fourth largest city in the United States) residents are uninsured (Machlin, et al., 2000). Harris County (Houston) has the highest proportion of Texas' uninsured, with 17 percent of the total uninsured population located there; Dallas County is next with 11 percent (TDI, 2003).

Texas leads the nation in the percentage of uninsured adults, number of uninsured working adults, and the percentage and number of uninsured children. In addition, every major Texas city has a higher uninsured rate than the national average

(State Comptroller, http/www.window.state.tx.us/specialrpt/uninsured05/). The characteristics unique to Texas that contribute to the problem are the stringent qualifications for eligibility for state and federal programs (Medicaid and the State Children's Health Insurance Program - SCHIP), a low rate of coverage in small businesses, and the demographics of the state. Businesses with fewer than 50 employees constitute 73 percent of all business in Texas, and only 37 percent of these small businesses offer health insurance. Furthermore, only 35 percent of employees in small businesses that were offered insurance actually enrolled, compared to 63 percent of employees in large businesses (TDI, 2003). Although some employees who do not take up employer sponsored insurance are insured through spouses or other family members, a significant number of them are uninsured. In addition, Texas has a high percentage of Hispanics* who tend to be young, have low incomes, and have low levels of education, all factors associated with a lack of health insurance (U.S. Census Bureau, 2004).

Figure 1: States with the Highest Uninsured Rate, 2004



Source: U.S. Census Bureau. (2005). Income, Poverty, and Health Insurance Coverage in the United States: 2004, DeNavas-Walt, Carmen, Bernadette D. Proctor, and Cheryl Hill Lee,.

Given the limited employer-sponsored coverage, Texas relies heavily on local governments to provide a safety net. The resources available to most counties are largely inadequate, and the largest metropolitan public hospitals are disproportionately affected by the uninsured because they find uninsured residents from neighboring counties drifting toward their health care providers. Local demand is met in large part by care delivered by medical residents. Residency programs are fragile nationwide, but Texas is particularly at risk. Texas lags far behind other states in terms of residency positions, with only 5,900, compared to the 14,000 in New York State (ACGME, 2004).

The indigent population of Texas, for the purpose of the county indigent care program, is defined as individuals at or under 21 percent federal poverty line (FPL) (TDSHS, 2005). Texas currently serves its medically indigent population in one of three ways: through hospital districts, public hospitals or county indigent care programs (CIHCP) (Chapter 61 of the Texas Health Code). Hospital districts are special taxing districts created to provide health care within their boundaries. Public hospitals are hospitals owned, operated or leased by a county or municipality. Texas also provides care through state-owned facilities, e.g., The University of Texas System's five hospitals and a number of specialty institutions. A CIHCP provides health care for some or all of a county's indigent residents. There are 142 CIHCPs, 131 hospital districts, and 23 public hospitals in Texas (Maberry, 2004). As noted elsewhere in this report, these public hospitals and clinics are currently unable to meet the needs of the uninsured due to limited resources,

*The terms Hispanic/Latino/Caucasian/Non-Hispanic, White, and African American/Black are used throughout this report depending on the terminology used in the sources of the data.

the magnitude of the uninsured population and the dependence upon expensive, intermittent emergency-room services.

For a county to receive state matching funds, it must spend at least 8 percent of its general revenue tax levy on health care for indigent persons. Only 21 counties had expenditures that exceeded this minimum. Eighteen additional counties spent between 6 percent and 8 percent (Canton, 2000).

Consequences of Lack of Coverage

A lack of adequate health insurance coverage has a major impact on many different aspects of the lives of not only the uninsured, but also the insured. A lack of coverage can affect an individual's physical health, mental health and access to care. It also has an impact on the community by affecting health care service providers, businesses and local economies.

The uninsured receive less preventive care, are diagnosed at more advanced stages of disease, and, once diagnosed, receive less therapeutic care than do the insured (IOM, 2002). Due to this, the uninsured suffer from poorer health and are more likely to die early than are those with coverage. The uninsured may be less able to work, provide for their families and contribute to the state's economy (IOM, 2004). In addition, diagnosis of an illness at a more advanced stage generally leads to higher medical costs. These higher medical costs are cross-subsidized by the insured through higher insurance premiums.

Health insurance coverage makes a substantial difference in the amount and kind of care people are able to afford, where they get health care, and whether they have a regular source of care (Hadley, 2002). The uninsured are more likely to postpone or forgo needed care. A survey conducted by the Kaiser Family Foundation found that almost half of the uninsured postponed seeking care in the past 12 months because of cost and over one-third did not receive needed care or skipped a prescribed drug or treatment. These gaps are three to four times higher than for those with health insurance (Hadley, 2002).

Texas serves only one-fourth of the individuals currently eligible for mental health services, and many Texans with mental illness have become ineligible for most public mental health services due to recent changes in eligibility rules (MHA Texas, 2005). The consequences of untreated mental illness manifest themselves in poor school performance, juvenile/criminal justice involvement, unemployment, homelessness and suicide (MHNC, 2004). Many individuals with untreated mental illnesses end up in the criminal justice system, at the expense of taxpayers.

The costs of treating the uninsured have had a major impact on Texas urban hospital districts, emergency departments, trauma centers and physicians. Uncompensated care provided by Texas hospitals increased to more than $7.7 billion in 2003 from $3 billion in 1993 (Center for Health Statistics, 2004). Emergency department utilization is on the rise nationwide (Seton, 2002). Many people are using emergency rooms to access primary care. For example, at Ben Taub Hospital in Houston, 57 percent of the visits to the emergency room are related to primary-care. Forty-four percent of these visits were from uninsured people. As the number of uninsured increases, compensation decreases, and emergency rooms may be forced to close because of financial difficulties (Bishop & Associates, 2002). In Texas, the number of emergency department visits increased to 8.6 million

in 2003 from 5.5 million in 1992 (THA., 2005). Moreover, the capacity to care for emergency patients diminished in the state; in 2002 as a result of permanent closures, there were 5 percent fewer emergency rooms than there were in 1999. This decrease means that an emergency room might no longer be nearby when it is needed for all patients.

Covering the uninsured will not be sufficient to solve the problem of uncompensated care; the inadequacy of existing coverage needs to be addressed as well. An estimated 16 million insured adults between the ages of 19 and 64 are underinsured, meaning they have limited coverage and face exclusion of major disorders, or high deductibles. More than half of these underinsured adults went without needed medical care services in 2003 (Schoen et al., 2005).

The Need for Change

Overall, current trends paint a bleak picture for the state of Texas. Based on trends from 1990–2000, the population of Texas is projected to increase to 46 million by 2040, an increase of 117 percent (Murdock et al., 2003). Even if the uninsured population increased only proportionately (which is unlikely), the state of Texas will be overwhelmed by the sheer numbers of the uninsured. Projections show that the number of physicians in Texas is expected to double by the year 2040, but the number of physician visits is expected to triple at the same time (Murdock et al., 2003). Thus, Texas is facing a future with an increasing population with less education and lower incomes, undoubtedly less health insurance, and higher demand for physician services (Murdock et al., 2003). This impacts not only the Texas economy, but also the state budget and funds received from taxes. With the uninsured rate in Texas higher than the national average, this problem will only be amplified by limited Medicaid eligibility, restrictive or nonexistent employer-sponsored health insurance coverage, and an inadequate number of medical professionals.

The costs of providing uncompensated care are largely borne through higher premiums paid by insured patients and their employers (about two-thirds of the cost) and by local and state taxes (the remaining one-third) (Families USA, 2005). Not only do these higher premiums affect businesses, but there is also increasing pressure to raise taxes. Rising health care costs coupled with uncertain economic conditions and declining profits are causing employees to bear more of the cost of employer-contributions to health insurance premiums through reduced wages or employee numbers and increased co-payments and premiums. Growing numbers of uninsured patients threaten economic stability, economic development, and the infrastructure for health care and prevention in the state.

At the federal level, the response to the growing problem of the uninsured has focused on cutting funding to programs in an effort to balance the budget. In 2006, Congress approved a net $4.8 billion cut from Medicaid spending over the next 5 years and a net $26.1 billion reduction over 10 years. This cut will occur at a time when states are facing dramatic enrollment increases in their Medicaid programs (Holahan, 2005). Reducing funding to Medicaid, thereby reducing enrollment, will result in the nation seeing an even greater uninsured population in the future. Reimbursement rates from providers like Medicaid are also decreasing, impacting hospitals that see large numbers of Medicaid and uninsured patients and impacting physicians who increasingly are unable to afford to participate in Medicaid.

Although Americans are now living longer than ever before and population health has increased dramatically over the last century, there are some areas of concern. For instance, an example of a developing health issue is obesity. Obesity has increased 61 percent in a 10-year period and accounts for 27 percent of growth in overall health care spending (Thorpe, et al., 2004). Approximately one out of four adults in Texas is clinically obese (Murdock et al., 2003). In Houston, 23 percent of the population is clinically obese, and 63 percent is overweight (CDC, 2004). The prevalence of diabetes increased 49 percent in the United States between 1990 and 2000 (Mokdad, et al., 2001). Increased health care utilization is one of the factors continually driving up costs, and obesity, diabetes and other chronic conditions are fueling increases in utilization.

Texas not only faces health challenges, but also educational attainment issues as well. Texas has lower rates of high school and college graduates than the national average, and over half of all Hispanics in Texas over the age of 25 do not have a high school diploma (Murdock et al., 2003). This is particularly disturbing because of the predictions for increases in the Hispanic population in the state over the next 15 years. By 2020, Hispanics will be 59 percent of the Texas population, with Caucasians second at 24 percent. Furthermore, school-aged children with conditions such as obesity, asthma and diabetes perform at lower levels on academic measures than their healthy counterparts. It is also believed that education improves an individual's health.

Addressing the problem of the uninsured requires a shared responsibility for the problem and the solutions. The sheer size and complexity of health care coupled with a lack of standardization across our system will require major contributions from all players to share in reforming our health care system (IOM, 2002). Such shared responsibility includes not only that patients take a more active role in treatment decisions, but also that health care providers ensure that patients understand what is expected of them to improve their health. Federal, state and local governments can help to alleviate the crisis by forming partnerships to reduce redundancy, barriers and cost. This can be accomplished by working collaboratively and across lines of authority to ensure needs are met.

Organization of This Report

Because of the importance and impending challenges confronting Texas in dealing with the problem of medically indigent individuals, the 10 major academic health institutions in the state sponsored a Task Force to identify strategies for confronting medically indigent care in Texas. These institutions are Baylor College of Medicine, Texas A & M, North Texas, Texas Tech, and the six health institutions of The University of Texas System. The Task Force consisted of individuals selected for their expertise and perspectives with regard to the problem of indigent health care in Texas. Members of the Task Force served as individuals and do not represent any organizations or special interests. Biographies of the members as well as the staff are included in Appendix A of the report.

The Task Force and its staff collected data, much of which was based on previous high-quality analyses of the various issues supplemented by commissioned white papers which are presented in this report as Appendices B through G. The final report was subject to anonymous peer review by

other experts in the field, in order to validate the quality of the analysis from additional sources.

The committee worked diligently to recommend strategies that can work together and that, if implemented, can reduce health care costs over time. Each recommendation addresses aspects along the health care continuum and, therefore, addresses not only the challenges of the uninsured, but also the challenges of rising health care costs, which leads to an increase of uninsured and underinsured individuals. The recommendations, therefore, work in concert to address the circular nature of this problem; if costs are reduced, more businesses, small and large, can offer coverage, and public monies can be leveraged to cover more individuals.

In Chapter Two, we provide an overview of the state of health and the uninsured in Texas as well as discuss the changing demographics of the population of the state and predictions for future populations. In Chapter Three, we describe the consequences of being uninsured, focusing on the consequences for health status, access to care, health service providers and the local economy. Chapter Four explores the current situation of the Medicaid and SCHIP programs in Texas, their financing and future. Chapter Five presents an analysis of reform options developed by other states, summarizing some of the issues and options in health insurance coverage along with innovations by other states to expand coverage to more people. Chapter Six highlights local initiatives undertaken by counties across the nation to expand care and coverage of the uninsured. Various models for expanding care and the lessons learned are presented. Chapter Seven discusses the employer insurance market in the state, state regulation of health insurance and implications for health care access. Chapter Eight describes trauma care in Texas and the impact of uncompensated care upon the trauma system. Chapter Nine presents the multifaceted relationships between education and health. The evidence on how health affects academic performance and how educational attainment affects health is examined. Chapter Ten describes the Task Force findings from this study and Chapter Eleven describes the Task Force recommendations.

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[Chapter Two]

Uninsured in Texas

The populations of both the United States and Texas have steadily increased over the past 150 years. As of 2004, over 293 million people lived in the United States and approximately 22.5 million people lived in Texas. This is a 15.3 percent and 24.5 percent increase, respectively, since 1990 (U.S. Census Bureau, 2004). Texas is second only to California in the numerical population increase from 1990-2004, and while the population of the state is increasing, Texas is experiencing a change in the ethnicity of its population. The Hispanic population, which comprised 32 percent of the population in 2000, is expected to continue to grow and to become the majority by 2025 (Murdock et al., 2003). A byproduct of this growing and changing population in Texas is the expansion of the number of people without health insurance coverage.

This chapter addresses the ethnicity and socioeconomics of the current population in Texas and the uninsured in the state. Four specific regions which have been found to have unique problems and solutions – the Texas-Mexico border, Bexar County, Harris County and Dallas County – are presented. The demographic projections of Texas in 2040, specifically addressing what the population growth will be and how the population's ethnicity, economic well-being and health will be affected, are also presented.

Texas Today

The state of Texas today reflects an increasingly multicultural and multiethnic population. The number of Hispanics is rising at a faster rate than the rest of the population. From 1990-2000, 60.3 percent of the overall net population change was attributed to an increase in the Hispanic population of 2.3 million people (Murdock et al., 2003). By comparison, increase in the Non-Hispanic, white population (783,036) accounted for 20.3 percent, the African American population (445,293) accounted for 11.5 percent, and Others (307,220) accounted for 7.9 percent of the net change in the population from 1990-2000. In 2000, the Hispanic population accounted for 32 percent of Texans, while the Non-Hispanic, white population represented 53.1 percent, the African American population 11.6 percent and others 3.3 percent. By 2004, the U.S. Census found that the Non-Hispanic, white population in Texas was no longer the majority (U.S. Census Bureau, 2004).

Table I – The Population of Texas

	2000		2004	
Non-Hispanic, white	*53.1%*	*11,074,716*	*47.0%*	*10,348,040*
African American	*11.6%*	*2,421,653*	*11.0%*	*2,455,650*
Hispanic	*32.0%*	*6,669,666*	*38.0%*	*8,269,410*
Other	*3.3%*	*685,785*	*4.0%*	*977,100*
Total		*20,851,820*		*22,050,200*

Source, 2000 data: The New Texas Challenge: Population Change and the Future of Texas, 2003

Source, 2004 data: Texas: Population Distribution by Race/ Ethnicity, (2003-2004), Henry J. Kaiser Family Foundation: statehealthfacts.org, based on the Census Bureau's March 2004 and 2005 Current Population Survey

Furthermore, over the past 10 years, we have experienced aging of the population from an average age of 30.8 (1990) to 32.3 (2000) in Texas (32.9-35.5 in U.S.). The largest increase in population was in the 45 to 54 age group. In Texas, there was a 60.3 percent population growth in this age group, which is significantly higher than the national average of 49.4 percent (Murdock et al., 2003).

The Uninsured in Texas

As the population in Texas and the United States steadily increased, so did the number of people without health insurance coverage. In the United States, the number of uninsured increased from 31 million in 1987 to 45 million in 2003, which is 15.6 percent of the 2003 population. Eighty-two million people, or, one-third of the population in the United States under 65, went without health insurance for some or all of 2002-2003 (Stoll and Jones, 2004). Fifty-three million uninsured, or two-thirds, were without coverage for six months or longer (Stoll and Jones, 2004).

The situation in Texas is much bleaker. Texas has consistently experienced a 60 percent higher prevalence of uninsured individuals than the rest of the country (U.S. Census Bureau, 2005). In 2005, the U.S. Census Bureau reported that 5.6 million or 25.1 percent of Texans were uninsured (U.S. Census Bureau, 2005). Another survey determined that 8.5 million or 43.4 percent of Texans under the age of 65 went without health insurance for all or part of 2002-2003 (Stoll and Jones, 2004). This is approximately the same number of people as the population of New Jersey. According to the U.S. Census Bureau, Texas has the largest percentage and the second largest number (after California with 6.6 million) (U.S. Census Bureau, 2005) of uninsured in the United States. Texas has many of the same characteristics among its uninsured as the rest of the country (i.e. age, income, education). One difference is that it has a larger population of Hispanics than any other state except California (U.S. Census Bureau, 2005). Within the Hispanic population there has been a trend toward a lower average age, lower incomes and lower levels of education compared to the general population, all factors that lead to an increased probability of being uninsured.

Families also have an impact on the percentage of uninsured. In the United States, marriage increases the chances of employment-based insurance while separation, divorce and being widowed increase risk for loss of coverage (IOM, 2002). One of every five families with children has one or more uninsured family members. This can cause the health of one family member to negatively impact the health and well-being of other family members due to the financial pressures it produces (IOM, 2002). High health care expenses due to a lack of coverage can even cause bankruptcy for a family. In order to maintain or obtain coverage, many family work choices may be constrained, especially those covered by public insurance programs which have income ceilings (IOM, 2002).

In Texas, 35 of the state's 254 counties account for 80 percent of the uninsured. A common misconception is that the uninsured are concentrated in the counties along the Texas - Mexico border. Five counties – Harris, Dallas, Bexar, Tarrant and El Paso – account for close to half of the statewide total of uninsured (Table II). Within these counties are the cities of Houston, Dallas, San Antonio, Fort Worth and El Paso (TDI, 2003). Of these five counties, only El Paso County borders Mexico.

Table II — Texas Counties with Ten Largest Uninsured Populations

County Name	Uninsured Pop.	% of Total
Harris	812,628	17.2
Dallas	499,970	10.6
Bexar	349,043	7.4
Tarrant	325,556	6.9
El Paso	231,534	4.9
Hidalgo	173,769	3.7
Travis	147,461	3.1
Cameron	103,474	2.2
Denton	81,413	1.7
Nueces	79,930	1.7
All Other	1,907,434	40.5

Source: Texas Department of Insurance, Working Together for a Healthy Texas, 2003.

Many counties outside of central cities are experiencing growing uninsured populations who often have distinct access problems of transportation and the absence of providers willing to accept uninsured patients, which results in these patients gravitating to large metropolitan area emergency rooms. Another reason for the high percentage of uninsured in Texas is its limited availability of coverage in federal health care mandated programs, Medicaid and the State Children's Health Insurance Program (SCHIP), whose mission is to cover those who cannot afford health insurance. Medicaid and SCHIP will be discussed more thoroughly in later chapters. Table III outlines the current federal poverty level (FPL), which is used to determine eligibility for state and federal insurance programs. The SCHIP income eligibility limit for parents is 200 percent FPL or $40,000 for a family of four in Texas. This covers the child only, although other states have expanded benefits to parents. The current SCHIP program in Texas takes 90 days to process new enrollees, 45 days to re-enroll, and requires all children to re-enroll every six months.

In addition, many adults cannot qualify for Medicaid in Texas since the limit for eligibility is approximately 21 percent FPL. For example, a non-pregnant, non-disabled parent under the age of 65 in a family of three, working full-time all year at minimum wage ($5.15 per hour) would earn too much to qualify for Medicaid, although his/her income is only $10,700 and well below the FPL (Stoll and Jones, 2004).

Table III — 2006 Federal Poverty Line

Single:	$9,800
2:	$13,200
3:	$16,600
4:	$20,000
Each Additional Person:	$3,400

Source: Federal Register, Vol. 71, No. 15, January 24, 2006, App. 3848-3849

Table IV — Enrollment of State Sponsored Health Insurance (October 2005)

Medicaid Enrollment	Texas
All Ages	2,723,267
0-18	1,836,291
Chip Program	
Enrolled	323,343

Source: Texas Health and Human Services Commission Demographics and Statistics http://www.hhsc.state.tx.us/research/dssi.htm#med

Economic Status of the Uninsured

Health insurance coverage is strongly and positively related to income. Two-thirds of all uninsured have low income levels (less than 200 percent FPL) (IOM, 2001). Fifty-nine percent of families with incomes at 50 percent FPL or less have all members covered, compared with 90 percent of families at 200 percent FPL. Fifty-six percent of Americans below the FPL were uninsured during some part of 2001 and 2002, compared with 16 percent of those at 400 percent of the FPL or more (IOM, 2002).

Members of families without wage earners are more likely to be uninsured. Nationwide, for every 100 people who become unemployed, 85 people, including family members, lose health insurance. With the downturn in the Texas economy after 2000, unemployment increased from 4.2 percent in 2000 to 6.5 percent in September 2003, escalating this problem (Families USA, 2003).

While the likelihood of being uninsured decreases as income increases, 25 percent of working individuals and their families with incomes from 300 percent to 400 percent of the FPL (from $55,980 to $74,040 for a family of four) were still uninsured in the United States (Stoll and Jones, 2004). Since eligibility to Medicaid and SCHIP are restricted to extremely low incomes, many people are ineligible. In addition they are not offered, nor can they afford to buy, employment-based or individual insurance. For a family of four at 100 percent FPL, which is approximately $18,000 a year, the average cost of private health insurance, $9,100 in 2005, is over half of their income. For individuals at 200 percent FPL, i.e. $36,000/year for a family of four, their health insurance premium would exceed 25 percent of their family income (Stoll and Jones, 2004). Although there are individuals in higher-income brackets who choose to be self-insured or assume the risks of no insurance, for the overwhelming majority of the uninsured, the lack of health insurance is an issue of affordability.

Even though they have low incomes, 71 percent of the uninsured were employed either full-time or part-time during 2001-2002. In Texas the percentage is slightly higher at 79 percent (Stoll and Jones, 2004). Unfortunately, many have jobs where health insurance is not offered, and many Texas industries are reducing health care coverage. Workers in construction, manufacturing, and wholesale and retail trade account for more than half (53 percent) of all uninsured Texans (TDI, 2003). These industries typically offer part-time and seasonal employment, cyclical work patterns with frequent layoffs, and relatively low cash wages and limited non-cash compensation.

In addition, small businesses with less than 50 employees constitute 73 percent of all businesses in Texas, similar to the national average of 76 percent. Of these small businesses, only 37 percent offer insurance. This is a significant drop from the 47 percent national average. Furthermore, only 35 percent of employees in small businesses that offered insurance actually enrolled, in comparison with 63 percent of employees in large businesses (IOM, 2003). This could be a result of small businesses offering less appealing or more expensive packages.

Demographic Characteristics of the Uninsured

Insurance coverage varies over the course of a person's life. Fortunately, the likelihood of being uninsured declines among adults as age increases; however, many children and young adults remain uninsured. Twenty-seven million or 37 percent of

all children in the United States were uninsured in 2002-2003 (Stoll and Jones, 2004). More than half of the uninsured children are eligible for public programs, but are not enrolled. In Texas, this could be a result of the SCHIP program requirement to re-enroll every six months or the lack of parent coverage in the program. Also, when children reach adulthood, they are no longer covered by their parents' insurance. Half of all 18 to 24 year-olds in the United States were uninsured in 2003 compared to 17 percent of 55-64 year-olds (Stoll and Jones, 2004). In Texas, 39 percent or 1.2 million 19 to 29 year-olds were without insurance (Families USA, 2003).

Disparities based on race and ethnicity also exist. Sixty percent of all Hispanics and 43 percent of African-Americans were uninsured (compared to 24 percent of Non-Hispanic whites) in the United States for some portion of the year in a two-year study by Families USA (Stoll and Jones, 2004). African-Americans and Hispanics are therefore two to three times more likely to be uninsured than Non-Hispanic whites (IOM, 2001). Foreign-born residents are three times more likely to be uninsured; non-citizens are twice as likely (IOM, 2001). In Texas, 24 percent of the uninsured are non-citizens. In addition, almost 3 million Hispanics in Texas are uninsured; this accounts for 40 percent of the uninsured population (Families USA, 2003).

Another factor that increases the likelihood of being uninsured is the level of educational attainment. Texas has lower rates of high school and college graduates than the national average (Murdoch, 2003). There is a strong correlation between education and income as well as between income and insurance. Those who have more education on average earn more money and have insurance coverage. One of every four uninsured adults in the United States has not earned a high school diploma (IOM, 2001). Thirty-nine percent of adults who have not graduated from high school are uninsured (IOM, 2001). Only nine percent of adults with college degrees are uninsured.

The Texas – Mexico Border

Eleven counties on or near the Texas-Mexico border region (Cameron, Dimmit, Hidalgo, Kinney Maverick, Starr, Val Verde, Webb, Willacy, Zapata and Zavala) have a disproportionately high number of uninsured, accounting for 34.6 percent of the population of the area. This is 10 percent higher than the Texas average (Warner, 2003). In 2000, 35.4 percent of the residents of these 11 counties lived below the poverty level, compared to 15.4 percent in Texas and 12.4 percent in the United States. In real dollars, these numbers translate to an average income of $13,622 in the border region, $27,752 in Texas, and $29,469 in the United States (Warner, 2003). Except for Maverick County, there are no public hospitals in the 11 county region. Therefore, to receive health services through the county indigent health care program, an adult must have an income below 21 percent FPL. To be eligible for Medicaid, a single adult needs an even lower income.

With present growth rates, the population in the 11 border-area counties will increase from 1.3 million in 2000 to 2.3 million in 2020. Eighty-eight percent of the population in these counties is Hispanic. By 2020, growth rates will make this closer to 93 percent (Warner, 2003). The increased immigration rate also amplifies the risk of infectious diseases being carried over from Mexico. Health care workers must also deal with the incongruence of

separate public health systems. The risk of disease and infection is heaviest in the border region, but once across the border, diseases can be carried farther into the state and country. The spread of communicable diseases such as tuberculosis and HIV infections are also more difficult to prevent as their carriers have greater mobility. Tuberculosis requires a minimum of six months of drug therapy and must be controlled on both sides of the border. The number of cases is much more concentrated in the border area (15.2 cases per 100,000) compared to the rest of Texas (8 cases per 100,000) (Warner, 2003).

There are other public health issues of concern in these 11 counties. Diabetes occurs in 8 percent of the population in the counties compared with an average of 6 percent in the rest of Texas (Warner, 2003). The crude birth rate (the number of live births per 1000 population) of 26.3 in the 11 counties in 2000 is significantly higher than the Texas or U.S. rates (17.9 and 14.7 respectively) (Warner, 2003). This indicates a heavier average demand for health care services. In addition there is inadequate prenatal care for women in the border area. This adversely affects the health of young children in an area where there are low rates of breastfeeding and poor-quality diets.

Harris County

Harris County, the largest county in Texas by population, and one of the fastest growing regions of the country, is home to 3.6 million people (Cookston, 2004). Although there are two federally qualified health centers (FQHCs) and 11 hospital district clinics, as well as federal funding for the homeless, over 1 million people are uninsured and an additional half million are underinsured (Cookston, 2004; Gateway to Care, 2006). The problem in Harris County is that of distribution of and collaboration among medical resources, not necessarily lack of such resources. There is a large supply of facilities, physicians and services, but a strong need for an infrastructure that will allow better primary care access for the uninsured (GHP, 2004).

The population of Harris County is 36.9 percent Hispanic, 38.7 percent Non-Hispanic white, 17.6 percent African-American, and 5.9 percent Other. Compared to the state median household income of $41,759, the median household income in Harris County is $43,639 (U.S. Census Bureau, 2004). Of the present 3.6 million residents, 31.4 percent have no health insurance, and the uninsured population includes 25 percent of the children and 51.7 percent of the Hispanic population in Harris County. The fragmentation of Harris County public and private safety net providers is inhibiting progress of its health care system; they barely meet one-third of the demand for their services, leading many of the uninsured to emergency rooms for medical care. Additionally, there are two public health departments, which are not coordinating their work; there are redundant services at clinics located near each other; agencies compete against each other for the same state or federal funding; providers vary in their eligibility standards; there is no referral system; and there are multiple health records for patients if they change providers. There are too few outpatient clinics to meet the need for access to health care. (GHP, 2004).

For these reasons, Harris County formed the Harris County Community Access Collaborative, now called Gateway to Care. It has over 100 members and affiliated organizations, including

all safety-net providers, community and faith based organizations, county and city government, not-for-profit hospital systems, advocacy groups, United Way, medical schools, universities and business community members (Cookston, 2004). The mission of Gateway to Care is to facilitate access to adequate health care for uninsured and underinsured persons in Harris County by coordinating these organizations to deliver needed services (Gateway to Care, 2006).

Some initiatives have included "Ask Your Nurse" — a 24-hour telephone triage service to give answers to urgent health care questions that help the patient decide if an emergency room visit is necessary. Another development is the Provider Health Network, which is a group of physicians who have offered to dedicate part of their work to pro-bono care. The Community Health Center Development Committee has been working to help communities develop federally qualified health centers in their neighborhoods, and to educate them on the complexities of running such a center. Gateway to Care, 2006).

In addition, the Greater Houston Partnership Public Health Task Force was created to address some of the issues in Houston. The task force performed detailed analyses and proposed a comprehensive plan for reorganization of city and county health services. They recommended a health information network to increase the capacity of community-based primary care sites, and local coverage strategies, which included an SCHIP premium assistance program, a Medicaid waiver for Medicaid and SCHIP parents, and a possible public/private insurance plan. The goal of this program was to expand coverage, enhance the ability to pay for care, and to direct financial support to providers that serve the low-income uninsured. The plan is still being implemented.

San Antonio and Bexar County

Bexar County is the home of the second largest city in Texas, San Antonio, and often the first metropolitan area reached after crossing the Texas-Mexico border (Wilson, 2004). Bexar County had a population of 1.5 million in 2003 (Murdock et al., 2003). This population is predicted to increase to 3.2 million by 2040 if the net migration rate is the same as the migration rate from 1990-2000 (Murdock et al., 2003).

In contrast to the rest of the state, Bexar County is predominately Hispanic at 56.1 percent, with 34.2 percent Non-Hispanic white, 7.2 percent African-American, and 2.5 percent Other. The city of San Antonio has a slightly higher Hispanic population of 58.7 percent (Wilson, 2004). The median household income in Bexar County in 2004 was $39,694 compared to $41,759 in the rest of Texas (U.S. Census Bureau, 2004).

The percentage of uninsured in Bexar County is 26.4 percent, which is only slightly higher than the state average (Wilson, 2004). In order to treat this population, San Antonio created a unique program called Carelink. Carelink is a membership program that reimburses providers who care for residents of Bexar County without health insurance and who are ineligible for Medicaid or SCHIP. To be eligible, a family's income must be below 200 percent FPL. Unfortunately, Carelink enrolls less than 15 percent of the uninsured population (about 55,000 people) due to funding restrictions (Wilson, 2004). This leaves a considerable gap in access for care.

Bexar County has four local health systems: the Bexar County Hospital District, Christus,

Baptist, and Methodist Health Care Systems. These four systems take responsibility for the indigent patients in the county, but the Bexar County Hospital District in San Antonio sees three times more uninsured than the rest of the local health systems combined. Also within San Antonio are two federally qualified health care centers, which operate more than a dozen delivery sites. With all these systems, the distribution of primary care providers is uneven. Fewer providers are located in neighborhoods where uninsured and underinsured residents live (Wilson, 2004).

Dallas County

Dallas County, with 23.7 percent of its residents uninsured, has the second-highest number of uninsured in Texas (United Way Dallas, 2005). Dallas County has about an equal population of Hispanic and non-Hispanic white individuals, at 35.6 percent and 38.4 percent respectively. African-Americans are 20.1 percent of the population, while 4.7 percent are Other. The median household income of the county is $43,444, compared to the Texas median at $41,789 (U.S. Census Bureau, 2004). The county's only public hospital, Parkland Health and Hospital System, which provides 50 percent of the care to the uninsured, is facing overcrowding as more uninsured patients resort to emergency-room care. In 2004, the Dallas County Commissioners Court estimated that uncompensated care amounted to $285 million across 10 local hospitals, and county taxpayers were spending an additional $311 million to pay for those treated at Parkland. The safety-net hospital is having trouble meeting all the needs of an increasing uninsured population, emergency rooms are overfilled, and doctors are not being paid for an increasing number of their services (Jacobson, 2004).

Because Parkland recently started a new policy of co-payments, there has been some overflow to private hospitals. For example, each time a patient is treated, he or she is asked to have some form of payment (even if a small amount.) Other patients who have been denied health insurance coverage at their job are asked to pay in full. Both Baylor University Medical Center and the Presbyterian Hospital of Dallas have seen an increasing number of uninsured patients. For this reason, private hospitals have resorted to referring patients back to Parkland after emergency care has been given (Jacobson, 2004).

It has been noticed that the surge of emergency room patients is in part due to an increasing Hispanic population seeking care at Parkland, most of whom are uninsured. Hispanic residents more than doubled between 1990 and 2003, and currently about half of Parkland's patients are Hispanic, while an even larger 80 percent of the babies delivered there are Hispanic (Jacobson, 2004). The hospital, which is open 24 hours a day, seven days a week, faces a growing need for more facilities and more finances (Magers, 2004).

Some initiatives have been undertaken to compensate doctors for caring for uninsured patients. With a grant from The Physicians' Foundation for Health Systems Excellence of Boston in 2004, the Dallas Academy of Medicine charity created PracticeNet Solutions to provide physicians with tools to manage the care and costs of these patients (Dallas County Medical Society, 2006). In addition, Project Access Dallas is an effort of the Dallas Medical Society, which involves volunteer physicians who see uninsured individuals in their practices. With the assistance of donated pharmacy services as well as other donated professional services, the project provides cost-effective care for uninsured

individuals. The Dallas Academy of Medicine also works to provide services at charitable clinics, immunizations for children and adults, reductions in transplant expenses for those in need, and awareness of home safety issues (Dallas Academy of Medicine, 1997). However, these organizations cannot do everything on their own.

The Future of Texas

Population Growth from 2000 to 2040

The Texas State Data Center, led by Steve Murdock, has projected that Texas will have continual population growth through 2040 (Table V), between 71.5 percent and 148 percent, depending on rates of migration (Murdock et al., 2003). The lowest increase would occur if there is net migration equal to half the rate from 1990-2000; the largest increase would come if the migration rate is equal to the 1990-2000 rate. The period between 2000 and 2002 had a slightly lower migration rate resulting in only a 117.7 percent predicted increase by 2040. Projections based on the 1990-2000 migration rate (Murdock et al., 2003) will be used in this chapter.

Table V – Population in Texas in 2000 and Projections of the Population in Texas in 2040

	2040	*Increase*
2000	*20,851,820*	
Net Migration Equal to ½ of 1990-2000	*35,761,159*	*71.5%*
Net Migration Equal to 1990-2000	*51,707,489*	*148.0%*
Net Migration Equal to 2000-2002	*45,388,036*	*117.7%*

Source: The New Texas Challenge: Population Change and the Future of Texas, 2003

In general, the median age of the population will be older. There will be an increase in the 65 and over age group and a decrease in the under-18 age group as a percentage of the whole (Table VI). This constitutes a 295.5 percent increase in the 65 and older population (Murdock et al., 2003). As a result, this will negatively affect the income level, health and health care expenses of the people of Texas.

Table VI – Percentage of Population by Age in 2000 in Texas and projections for 2020 and 2040 (1.0 migration)

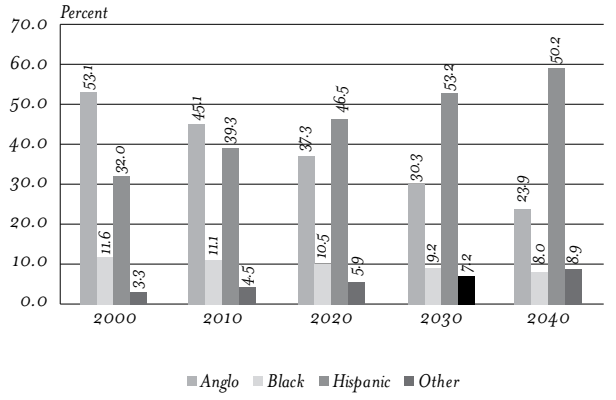
	2000	2020	2040
<18	28.2%	24.9%	21.4%
18-24	10.6%	9.6%	9.1%
25-44	31.1%	30.0%	29.3%
45-64	20.2%	23.3%	24.3%
65 +	9.9%	12.2%	15.9%

Source: The New Texas Challenge: Population Change and the Future of Texas, 2003

Projected Population by Ethnicity

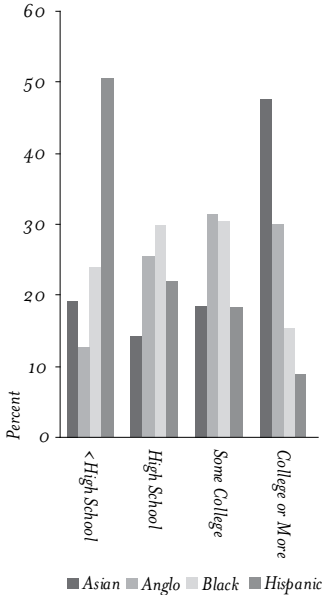
As previously discussed, in Texas the Non-Hispanic white population is 49.5 percent with Hispanics as the second largest ethnicity at 35 percent (U.S. Census Bureau, 2004b). However, if the population increases, using the 1990-2000 migration model, Texas is predicted in 2040 to reverse these percentages (Murdock et al., 2003). Hispanics will become the majority in Texas with 59.2 percent, while the Non-Hispanic white population will be the second largest ethnicity at 23.9 percent (see Figure 1) (Murdock et al., 2003). This shift is predicted to happen between 2025 and 2035.

*Figure 1: Projected Proportion of Population by Race/Ethnicity in Texas, 2000 – 2040**



*Using U.S, census count for 2000 and Texas State Data Center 1.0 population projection scenario for 2010–2040
Source: The New Texas Challenge: Population Change and the Future of Texas, 2003

Figure 2: Educational Attainment in 2000 in Texas for Persons 25+ Years of Age By Race/Ethnicity



Source: The New Texas Challenge: Population Change and the Future of Texas, 2003

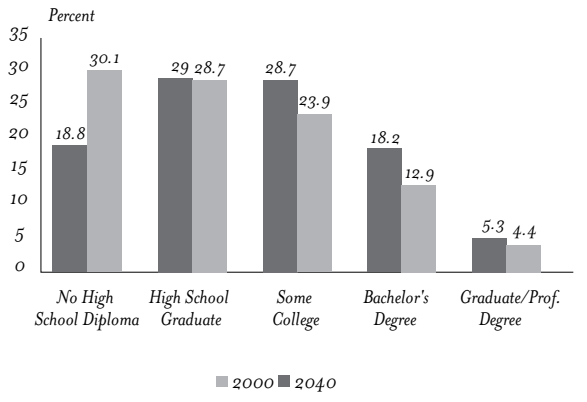
Education and Income

In 2000, Texas had a lower percentage of high school (75.7 percent vs. 80.4 percent) and college graduates (23.2 percent vs. 24.4 percent) in the 25 and older population compared to the national average. In addition, over half of all Hispanics in Texas over the age of 25 did not have a high school diploma (see Figure 2) (Murdock et al., 2003). This is significantly higher than other ethnic populations in the state.

The current projections show that the percentage of the Texas population with high school degrees will remain stable (see Figure 3), but there will be an increased proportion of workers in the labor force who do not have a high school degree (from 18.8 percent to 30.1 percent) (Murdock et al., 2003). This results in decreased percentages of workers with undergraduate and graduate/professional degrees. As discussed previously in this chapter and in Chapter Nine – Education and Health – higher education attainment correlates with a higher income and therefore an increased likelihood of being insured. Therefore, decreased numbers of workers with higher-education degrees can have a negative impact on the Texas economy, especially the high-tech industries looking for workers with such qualifications.

The prime wage-earning years in Texas are from age 45-54. As the population ages, the prime wage-earning population will begin to decrease, resulting in decreased tax revenues. Current demographic projections show the average real income of Texans dropping from $54,441 in 2000 dollars to $47,883 by 2040 (Murdock et al., 2003). With projections showing a less educated work force and a drop in average income, it is very likely that the current number of uninsured in Texas will increase if changes are not implemented.

*Figure 3: Projected Percent of Labor Force by Educational Attainment in Texas, 2000 and 2040**



** Projections are shown for the 1.0 scenario.*

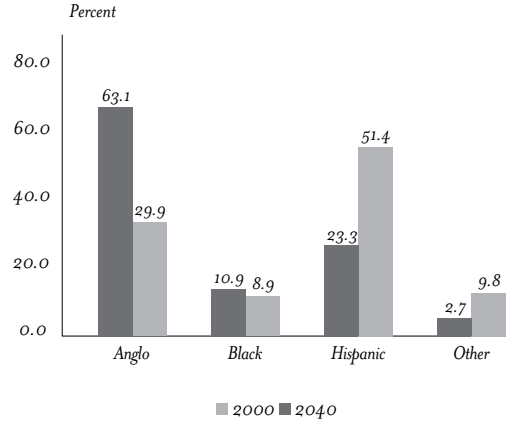
Source: The New Texas Challenge: Population Change and the Future of Texas, 2003

Health and Disease Incidences

The Texas State Data Center also performed projections regarding the state of the health of Texas in 2040. The center determined that there will be a 161.4 percent increase in incidence of diseases and disorders in Texas from 2000 to 2040, which is higher than the predicted population increase of 148.0 percent. This is an increase from 49.5 million to 129.5 million people affected by these diseases. When the figures are refined based on ethnicity, it is noted that the Hispanic population will be responsible for the largest percentage of incident diseases in adults and children (see Figures 4 and 5) (Murdock et al., 2003).

One particular area of concern is the prevalence of overweight and obese adults as determined by their body mass index (BMI). BMI is the ratio of a person's weight in kilograms to height in meters squared. In 2000, there were 5.5 million overweight and 3.5 million obese adults in Texas (see Table VII). Using the migration rate from 1990-2000, it is projected that there will be 15.7 million overweight and 14.3 million obese adults by 2040 (see Figure 6). The obese population will increase from 23.5 percent to 35.8 percent of the total population by 2040. When the obese population is subdivided according to ethnicity, the largest increase by far is projected to be among the Hispanic population (see Figure 7). Further, as a result of a growing number of cases of obesity, we see that incident diabetes in Texas is projected to increase from 943,909 in 2000 to 3,389,074 in 2040. This is a 259 percent increase, mostly due to an increased incidence of diabetes in Hispanics (619.5 percent) (Murdock et al., 2003).

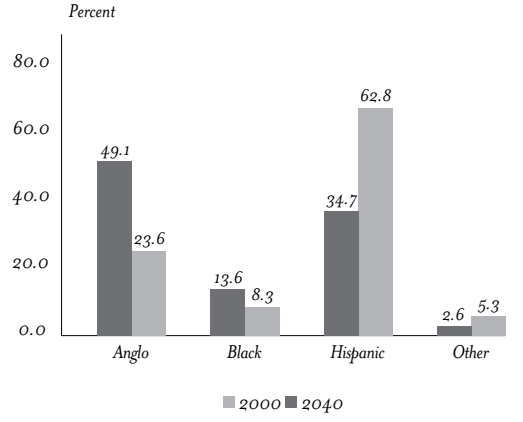
*Figure 4: Projected Percent of the Prevalence of Diseases/Disorders for Adults by Race/Ethnicity in Texas, 2000 and 2040**



** Using Texas State Data Center Population Projections 1.0 scenario for 2000 – 2040.*

Source: The New Texas Challenge: Population Change and the Future of Texas, 2003

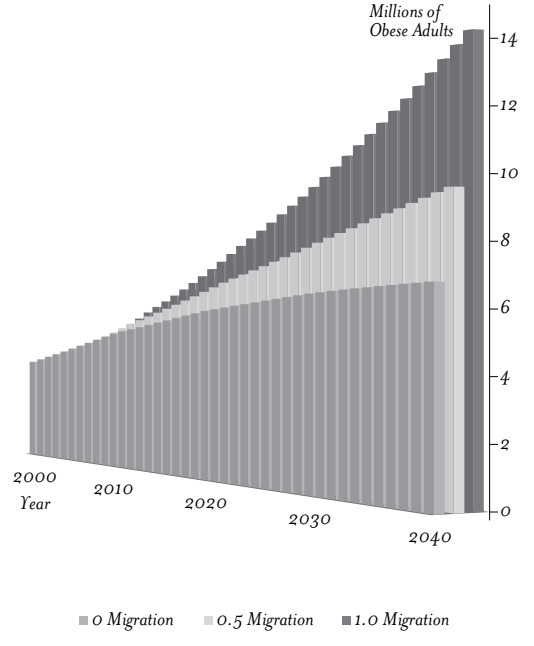
Figure 5: Projected Percent of the Prevalence of Diseases/Disorders for Children by Race/Ethnicity in Texas, 2000 and 2040*



** Using Texas State Data Center Population Projections 1.0 scenario for 2000 - 2040.*

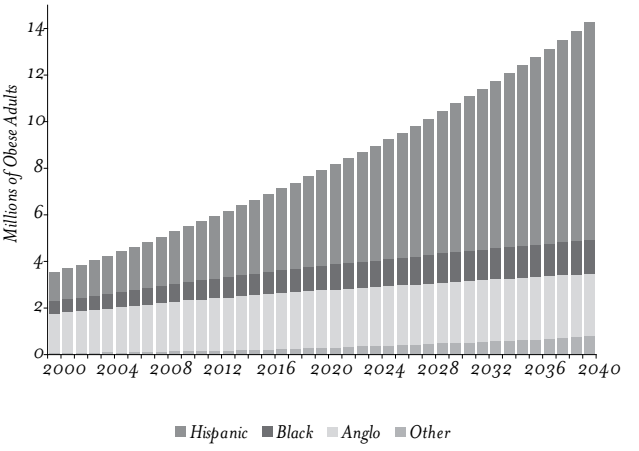
Source: The New Texas Challenge: Population Change and the Future of Texas, 2003

Figure 6: Projected Number of Obese Adults by Migration Scenario — Texas, 2000-2040



Source: The New Texas Challenge: Population Change and the Future of Texas, 2003

Figure 7: Number of Obese Adults by Race/Ethnicity, 1.0 Migration Scenario — Texas, 2000-2040



Source: The New Texas Challenge: Population Change and the Future of Texas, 2003

Table VII — Projected Number of People (in millions) and Prevalence of Overweight and Obese Adults in Texas

	Normal		Overweight		Obese	
Year	#	%	#	%	#	%
2000	5.9	39.6	5.5	36.9	3.5	23.5
2010	6.4	33.2	7.3	38.0	5.5	28.8
2020	7.1	29.0	9.5	38.7	7.9	32.3
2030	8.3	26.5	12.2	39.1	10.8	34.4
2040	9.9	24.8	15.7	39.4	14.3	35.8

Source: The New Texas Challenge: Population Change and the Future of Texas, 2003

The Problem Increases

Overall, this paints a bleak picture for the future of health and economic vitality in Texas if we continue on our current path. Texas is facing a future with an increasing population with less education and lower incomes. This will have an impact on not only the Texas economy, but also the state budget and funds received from taxes. In addition, the

increased incidence of diseases may overwhelm the current health care and Medicaid system. Projections show that the number of physicians in Texas is expected to more than double by 2040 to 83,348 from 30,531, but the number of physician visits will triple (151 million from 56 million) in the same time. Furthermore, the expected number of days in hospital care will also triple (34 million from 11 million) (Murdock et al., 2003).

With current trends, the model predicts Medicaid enrollment to almost triple (see Figure 8). This will result in Medicaid taking a larger and larger percentage of the already stretched state budget. Expenses related to Medicaid are also expected to increase from $4.4 billion in 2000 to $12.3 billion in 2040. A disproportionately large share of the Hispanic community has Medicaid and this proportion will increase from 49.1 percent of Medicaid recipients to 69.9 percent by 2040 (see Table VIII) (Murdock et al., 2003).

Table VIII — Percent of Medicaid Enrollment in Texas by Race/Ethnicity

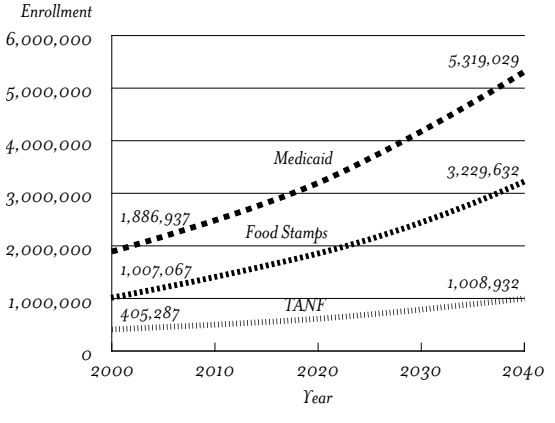
	2000	2040
Non-Hispanic, white	*26.9%*	*12.5%*
African American	*22.7%*	*12.8%*
Hispanic	*49.1%*	*69.9%*
Other	*1.3%*	*5.1%*

Source: The New Texas Challenge: Population Change and the Future of Texas, 2003

At present, Texas faces one of the highest uninsured percentages in the country, and according to current trends, these numbers will continue to increase. Higher than the national average, the number of uninsured in Texas results from and will be amplified by limited Medicaid eligibility, restrictive and nonexistent employer-sponsored health insurance coverage, unaffordability of private or company insurance, an inadequate number of medical professionals, and unevenly distributed resources. Other factors contributing to the challenge of the uninsured include trends in age, income, ethnicity and education of the state population. A third set of issues arises from immigration growth, which increases the number of people likely to be uninsured.

Consequently, with an increased number of uninsured, Texas state spending on government programs will increase, as will costs to those with coverage. Not only could this lead to an unattractive environment for businesses within the state, but it could also create inaccessible, insufficient and unfulfilling medical services for more than just the uninsured. Increasing health care risks and predictions of Texas funding, demographics, education and business practices must be taken into account to fully understand and ameliorate the current health of Texas.

Figure 8: TANF, Food Stamp, and Medicaid Enrollment in Texas in 2000 and Projections to 2040*



**Projections are shown for the 1.0 scenario.*

Source: The New Texas Challenge: Population Change and the Future of Texas, 2003

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[Chapter Three]

Consequences of the Uninsured and Underinsured

Living without health insurance greatly impacts the life of an individual. The uninsured are less likely to receive adequate care and often when they do, it comes later, with serious consequences such as increased mortality and lower quality of life. Furthermore, the uninsured and underinsured are less likely to receive the preventive care they need.

In addition to affecting the individual, the uninsured dramatically impact the communities in which they live:

- The uninsured are often unable to pay for medical services they receive.
- These expenses are passed on to others through higher medical fees and insurance premiums.
- Since many uninsured and underinsured individuals obtain primary care at emergency rooms, they risk overburdening of the local trauma system.
- This impacts the finances and ability of emergency rooms to handle trauma.
- The overuse of an emergency department can even lead to increased local taxes.

Many individuals without health insurance still seek care, but often not in the most cost-effective manner. Since emergency rooms are obligated to evaluate every patient who comes seeking care and offer immediate services if needed, they are often seen as a reliable source of care. Unfortunately, this is an expensive and inefficient way to receive care. A more cost-effective setting for the uninsured to seek care is through Federally Qualified Health Centers (FQHCs). These are local non-profit community health providers that provide affordable primary care and prevention services. Unfortunately, less than 10 percent of the uninsured population in Texas is served by FQHCs (Camacho, 2004).

In this chapter, we will review the individual and societal consequences of being uninsured and underinsured. We will begin by reviewing the impact on the health of the individual. We will also look at the effect that the large number of uninsured has on local hospitals, local economies, and the Texas economy as well as on large and small businesses.

Consequences for Health Status

Poorer Health and Shorter Lives

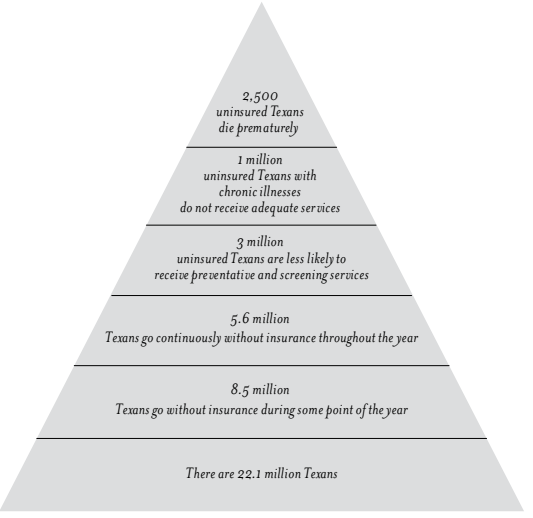
Texas leads the nation, at 25.1 percent, in the percentage of people who lack health insurance (U.S. Census Bureau, 2005). The tragedy of this is that the uninsured are more likely to be hospitalized for problems that could have been prevented had they received appropriate and timely outpatient care. Screening and subsequent referral is a critical component of the detection of disease in its early stages.

People who lack health insurance have reduced access to preventive care and are less likely to receive timely diagnosis of screenable conditions such as cancer and high blood pressure (IOM, 2002). This is true in both the young and the elderly. Uninsured children are much less likely to have received a well-child checkup within the past year, regardless of age, race, ethnicity, income or health status. A recent study shows that over 50 percent of

uninsured children did not receive a checkup in 2003, almost twice the rate (26 percent) for insured children (Kenney, *et al.*, 2003). Additionally, the insurance gap in Texas is especially high among Hispanics, of whom 60 percent are without health insurance (Families USA, 2003). These findings are particularly worrisome given the aforementioned shifting demographic trends in Texas (see Chapter Two – Uninsured in Texas).

For those that have access, screening for cancer can be particularly effective. Cancers that can be detected early by screening account for about half of all new cancer cases and include cancers of the breast, colon, rectum, cervix, prostate, oral cavity and skin (ACS, 2005). In 2005, an estimated 1.3 million people in the United States will be diagnosed with cancer, and over half a million will die of the disease that year. Estimates of the premature deaths that could have been avoided through screening vary depending on a variety of assumptions, but may be as high as 35 percent (ACS, 2005). Beyond the potential for avoiding death, screening may reduce cancer morbidity since treatment for earlier-stage cancer is often less aggressive than for the more advanced cancers. Increasing age is one of the primary risk factors, and screening at recommended ages has been shown to reduce mortality from these cancers. According to the American Cancer Society, the five-year survival rate is about 85 percent (ACS, 2005).

Figure 1: Consequences of the Uninsured and Underinsured in Texas



The uninsured are more likely to suffer adverse consequences of chronic diseases such as diabetes. More than 1.3 million Texans have been diagnosed with diabetes, and an additional 300,000 are estimated to be undiagnosed, but living with the condition. Conservative estimates rank diabetes as the sixth leading cause of death in Texas (Texas Diabetes Council, 2005) and uninsured adults with diabetes are less likely to receive recommended services (IOM, 2002). Lacking health insurance for longer periods increases the risk of inadequate care for this condition and can lead to uncontrolled blood sugar levels, which, over time, put diabetics at risk for additional chronic disease and disability such as end-stage renal disease and blindness from diabetic retinopathy. Diabetes accounts for the greatest number of new cases of end-stage renal disease. As might be expected, uninsured patients with end-stage renal disease begin dialysis with more severe disease than do those who had insurance before beginning dialysis (IOM, 2002).

Overall, the uninsured receive less preventive care, are diagnosed at more advanced stages of disease, and once diagnosed, receive less therapeutic care than do the insured. Thus, lack of adequate insurance leads to premature death. The case of cancer, the second leading cause of death in Texas, is illustrative of this point. Individuals who are poor, lack health insurance, or otherwise have inadequate access to quality cancer treatment experience higher cancer incidence, higher mortality rates and poorer survival rates (IOM, 2002).

The situation is similar with HIV. Texas reported 4,802 cases of HIV (not AIDS) in 2003, for an overall rate of 22 cases per 100,000 people. This represented a 3 percent increase over the 4,666 cases reported in 2002. Uninsured adults with HIV infection are less likely to receive highly effective medications that have been shown to improve survival, and consequently, they die sooner than those with coverage (IOM, 2002). Having health insurance has been found to reduce mortality in HIV-infected adults by 71 percent to 85 percent over six months (IOM, 2002).

Even those for whom disease may not be fatal may experience diminished quality of life. Interest in health-related quality of life (HRQOL) is soaring, because Americans are living longer and wanting to stay active and independent for as long as possible. Great strides have been made in combating fatality from many illnesses, such as cardiovascular diseases. Although cardiovascular diseases are the leading cause of death in the United States, their impact on disability is also dramatic. Two-thirds of heart attack patients fail to recover fully and 20 percent of stroke survivors require institutional care (CDCP, 2004). Many survivors of these cardiovascular events cannot perform daily tasks. It is estimated that 10 million Americans are disabled by cardiovascular disease (CDCP, 2004).

Health-related quality of life is far worse for people with diabetes than for those without the disease. According to the Behavioral Risk Surveillance System, on average, older adults with diabetes reported nearly twice as many unhealthy days (physical or mental) compared to those without the condition (Brown, 2004). People with diabetes report having more disabilities, poorer health status, less income and less access to care. For these people, quality of life is impacted by depression, heart disease, stroke, blindness and limb amputations.

Cancer is another disease for which there are many more long-term survivors today than in the past. In addition to the side effects of treatment, other factors, including the cost of treatment, the need for increased medical care, and limited access to quality care, significantly impact the quality of life of these survivors.

Altogether, the lack of health insurance adversely affects access to screening procedures for cancer and high blood pressure as well as other potentially treatable diseases. It also contributes to diminished quality of life due to lack of preventive and therapeutic care. Increasing the number of insured children and adults would increase accessibility to preventive and standard health services, and thus offer more complete and beneficial care to all.

Consequences in Access to Care

Access to care implies that people have a place to go and the financial and other means of obtaining health care services (Aday, 1993). In this section we discuss the impact of the large number of

uninsured Texans on higher medical insurance costs, and higher costs of health services, emergency rooms and physician services.

Higher Health Insurance Costs

Nationally, nearly 48 million Americans were without health insurance for 2005, including 5.6 million Texans (Families USA, 2005; U.S. Census Bureau, 2005). A recent national study reports that more than one-third (35 percent) of the total $65 billion cost of health care services provided to people without health insurance is paid out-of-pocket by the uninsured themselves (Families USA, 2005). The remaining $43 billion is primarily paid from two sources: about one-third is from a number of government programs, and two-thirds is paid by people with health insurance through higher premiums.

In 2005, Texas ranks eighth among states in the highest amount of added premiums due to unreimbursed costs of health care for the uninsured, behind New Mexico, Oklahoma, West Virginia, Montana, Alaska, Arkansas and Idaho (Families USA, 2005). Assuming no major policy changes by 2010, Texas will rank fourth nationally. In Texas, the 2005 health insurance premiums for a family with private, employer-sponsored coverage are $1,551 higher annually due to the cost of the uninsured (Families USA, 2005). Premiums for individual health insurance coverage are $550 higher for privately insured Texans in 2005. By 2010, these hidden costs will increase to $2,786 for premiums for families and $922 for premiums for individuals.

Higher Cost of Health Services

The Kaiser Commission on Medicaid and the Uninsured estimated the 2004 medical cost for the uninsured nationally at $125 billion (Hadley, 2002). The cost borne by health care providers nationally is estimated to be $41 billion or 33 percent.

Non-citizens are almost three times as likely to be uninsured as are U.S. citizens. Nearly 60 percent of non-citizens went without insurance in 2002, compared to 21 percent of U.S. native-born citizens and 33 percent of naturalized citizens. In Texas, most of the uninsured are legal residents; of the state's uninsured, more than 4 million (72.8 percent) are U.S. citizens (HCHTF, 2004). The highest concentration of the Texas uninsured is in the larger urban areas, with 80 percent residing in just 35 of the state's 254 counties (for more details, see Chapter Two – Uninsured in Texas) (TDI, 2004).

The cost of uncompensated care to hospitals in the United States was estimated to be $22 billion, or 5.4 percent of total expenses in 2002 (Miller & Assoc., 2005). The Texas health care infrastructure is heavily strained by the large number of uninsured. The burden of uncompensated care falls on a system already struggling to meet increases in the demand for services resulting from demographic and reimbursement changes. From 1992 to 2003, the number of patients admitted to Texas hospitals increased by 32 percent, to 2.6 million from 1.9 million, while the population change during the 1990s was only 23 percent (Perryman, 2005). During the same period the number of outpatient visits more than doubled, from 16 million to an estimated 35 million.

There are many structural issues that limit Texas counties' capacity and availability of health services. Almost 25 percent of all counties (63 out of 254) do not have an acute care hospital (Perryman, 2005). Another 50 percent, 123 counties, have only one

facility. As the number of uninsured Texans continues to grow, the impact is being felt in the rise of bad debt and charity care as well as increased use of hospital emergency rooms.

Public policy trends in Texas, as in the nation, have resulted in a shift of responsibility for paying for health care services for the uninsured from the states to the local communities. Texas hospitals treated more than 134,000 charity inpatients in 2003 (Perryman, 2005). This care was provided by a variety of hospital organizations. Of the 532 hospitals in Texas, 137 (26 percent) are government-controlled. The largest proportion of these (20 percent) are run by hospital districts or authorities.

Impact on Counties with Hospital Districts

Hospitals within hospital districts in urban counties bear most of the burden for uncompensated care in Texas (Miller & Assoc., 2005). Of the 10 Texas counties with the largest number of uninsured residents, seven are counties that support hospital districts with local *ad valorem* taxes (Harris, Dallas, Bexar, Tarrant, El Paso, Travis and Nueces).

In Texas hospitals, uncompensated care (defined as bad debt plus charity care) increased from $3 billion in 1993 to more than $7.7 billion in 2003 (CHS, 2004). In 2003, Texas hospitals reported $3.5 billion in bad debt and $4.2 billion in charity care (CHS, 2004). Charity care is provided to patients who meet the hospital's own criteria for inability to pay. Only a portion of a patient's account that meets the hospital's charity care definition is recognized as charity.

An analysis of charity and other uncompensated care and community benefits underscores the heavy burden placed on hospitals and community clinics by uninsured Texans (CHS, 2004):

Emergency Care	*$369 Million*
Trauma Care	*$82 Million*
Neonatal Intensive Care	*$6 Million*
Freestanding Community Clinics	*$72 Million*
Collaborative Efforts With Local Governments	*$9 Million*

Impact on Emergency Rooms

The federal Emergency Medical Treatment and Active Labor Act (EMTALA) requires hospitals to screen emergency patients to determine whether an emergency medical condition exists, and if so, to stabilize the patient regardless of ability to pay. While the act assures access to emergency services, the payments for these services are largely below costs or unfunded (Miller & Assoc., 2005). Between 1992 and 2003, Texas hospitals reported a 55 percent increase in the number of emergency room visits from 5.5 million to 8.6 million. Texas hospitals were reimbursed 34 cents for every dollar in charges for emergency services. An estimated 31 percent of trauma patients are either Medicaid or uninsured patients (Texas Hospital Association, 2005). These trends in the utilization of emergency medical care services are not financially sustainable in the long run.

Emergency department utilization is on the rise nationwide (Seton Healthcare Network, 2002). Findings from the National Hospital Ambulatory Medical Care Survey indicate that there was an increase in use, in terms of annual visits per one-hundred persons, from 36 visits in 1992 to 37.8

visits (McGraig, 2001). Nationwide, the number of emergency departments grew only 1 percent in that time period, from 5,707 in 1992 to 5,769 in 1999 (McGraig, 2001).

While the number of emergency room visits increased in Texas, the capacity to care for emergency patients diminished. In 2002 there were 5 percent fewer emergency departments than in 1999. Also, the increase in limited-service hospitals has resulted in a decrease in emergency room patient capacity. Texas leads the nation in the number of physician-owned limited-service hospitals with 50 such facilities; 28 more limited-service hospitals under development. Between 2000 and 2004, the number of physician-owned limited-service hospitals in Texas doubled from 25 to 50 (Association, 2005b). Limited-service providers serve relatively fewer uninsured patients and deliver significantly less emergency care. Full-service hospitals had an average of 14,760 emergency room visits per year or 40.4 visits per day, compared to an average of 480 emergency room visits per year or 1.3 visits per day for physician-owned limited-service hospitals. In addition, many of the visits to emergency rooms are for primary care and non-emergencies. More detailed discussion on trauma centers and emergency rooms can be found in Chapter Eight – Trauma Care in Texas.

Impact on Emergency Room Diversion

Trauma care in Texas is regionalized. Most of the uninsured Texans live in urban counties where hospital district hospitals both provide most of the indigent care and are the primary source of Level I (most intensive level of care) trauma centers. The growing number of uninsured places these safety net health systems in double jeopardy.

In July 2002, the Texas Hospital Association published a study showing the impact of increasing demand on the state's emergency departments. Statewide, 66 percent of the hospitals reported that their emergency departments were at or above capacity, including 100 percent of the Level I and Level II trauma centers and 84 percent of the Level III trauma centers. Based on patient charges, 14 percent of patients seen in Texas emergency departments are trauma patients; a total of 20 percent of these patients reside in a county outside the one providing trauma care; and another 17 percent of the medical patients treated are in hospitals outside of their counties of origin (THA, 2005a).

All of the major hospital district hospitals and academic teaching hospitals that provide a large proportion of the care to the uninsured also serve as their community's Level I or II trauma centers. When a hospital's emergency room cannot handle additional patients, it may go on diversion. This is when the hospitals are unable to provide appropriate care to all trauma patients; therefore, they send new patients to another hospital in the area. In many areas, especially urban areas with trauma centers, emergency rooms are going on diversion more and more. The Texas Hospital Association reports that emergency room diversions are a significant health policy challenge (THA, 2005a). In 2003, 75 Texas hospitals diverted ambulances due to overcrowding and lack of staffed beds. All Texas Level I and Level II trauma centers diverted ground or air ambulances at some time during the year.

In 2004, the 234 Texas hospitals eligible to obtain state-designated trauma funding received only $18 million to help offset more than $222 million reported in uncompensated trauma care provided the previous year. In March 2005, another

$18 million in state trauma funds was distributed to the 221 eligible and applying hospitals to offset more than $208 million reported in uncompensated trauma care (TDSHS, 2005).

Impact on Physician Services

Pagán and Pauly (2006) studied the relation between community-level uninsurance rates and the unmet medical needs of insured and uninsured adults. They found that the proportion of the local population without health insurance coverage was positively associated with having reported unmet medical needs, but only for insured adults. On average, a five percentage point increment in the local uninsured population is associated with a 10.5 percent increase in the likelihood that an insured adult will report having unmet medical needs. They conclude that local health care delivery systems are negatively affected by high uninsurance rates.

Other studies have shown that access to health care for both the insured and the uninsured is impacted by high community-level uninsurance rates (Andersen et al., 2002; Cunningham and Kemper, 1998; IOM, 2003).

There is little empirical evidence documenting a direct relationship between the large number of uninsured patients and the lack of access to or availability of physician services in Texas. However, there are emerging trends that would indicate that access to physician services, especially for patients covered by Medicaid, is becoming increasingly difficult.

The Texas Medical Association conducts a survey of Texas physicians every two years to track changes in physician practice behaviors. The 2004 survey found that only a small percentage, 6 percent, of Texas physicians in active practice reported that they are not accepting any new patients, regardless of insurance status (THA, 2004).

The following statistics represent those with open practices, currently accepting new patients:

- ***Uninsured Patients*** – In spite of their difficulties in financing costly medical services, uninsured patients had relatively better access to basic physician services, as 68 percent of physicians with open practices continue to see new uninsured patients and only 2 percent of physicians reported refusing to take new uninsured patients.

- ***PPO Insured Patients*** – Eighty percent of Texas physicians with open practices reported accepting these privately insured patients.

- ***Medicaid Patients*** – Access for Medicaid patients continues to decline. Only a minority of Texas physicians (45 percent) report unlimited acceptance of new Medicaid patients, a decrease from 49 percent reported in 2002 and 67 percent reported in 2000. A majority (62 percent of physicians) report that they accept no Medicaid patients, because of low reimbursement.

- ***Medicare Patients*** – In 2004, access for Medicare patients significantly decreased. Two-thirds (68 percent) of physicians with open practices continue to accept all new Medicare patients, but that number has declined from 74 percent in 2002 and 78 percent in 2000. Access to new Medicare patients varied by physician specialty: psychiatrists (46 percent), internists (59 percent) and family practitioners (60 percent) were less likely to accept new Medicare patients. Regionally, acceptance of new Medicare patients varied: The urban areas of Dallas and Fort Worth reported the lowest

acceptance (63 percent) and (62 percent) respectively, with Lubbock (86 percent), Brownsville (80 percent) and El Paso (76 percent) reporting the highest acceptance proportions.

Clues to physician practice behavior can be gleaned from a better understanding of the costs of providing medical services. According to the Medical Group Management Association (MGMA) data compiled by the Texas Medical Association, the average cost per medical service, measured in relative value units or RVUs, was $58 or about 28 percent less than billed charges of $81 per RVU. Medicare fees (2004) in Texas are only $37, or 36 percent below the average cost; and Medicaid fees of $27 were almost half the cost.

While many Texans remain uninsured, costs of insurance, emergency rooms, and health and physician services are increasing. To compensate for care of the uninsured, local communities are taking on health care costs and insurance premiums are increasing. The uninsured are resorting to crisis care in emergency departments, which leads to emergency room diversion and inadequate care. Further, erosion of the private and public reimbursement over time has diminished physicians' ability to continue to provide medical services below cost, especially to Medicaid patients. These are areas of increasing concern in maintaining or improving access to care in terms of cost and location.

Effects of Uninsured to Texas and Local Economies

As noted previously in this chapter, the costs of providing health care to the uninsured are substantial. Data from the Texas Department of State Health Services (TDSHS) survey in 2003 showed that 466 hospitals (two hospitals were not included) had $7.5 billion in total uncompensated care, both bad debt and charity charges. Hadley and Holahan reported in Health Affairs (February 2003) that uncompensated care by hospitals comprises approximately 63 percent of overall charges for care of the uninsured. Clinics and direct care programs account for approximately 19 percent and physicians 18 percent of uncompensated care, respectively. It is difficult to extrapolate directly from charges to incremental costs of care, but even if costs are conservatively estimated at 50 percent of charges, this indicates real costs to the state approximating $6 billion.

In the face of health care inflation, costs have significantly increased between 2003 and 2005. Texas does receive some federal assistance to offset these costs in the form of disproportionate share hospital (DSH) payments, which were approximately $900 million in 2004 ($1.3 billion including the state portion) (THHSC, 2004). This still leaves in excess of $5 billion in real costs which are borne through a variety of state and local programs and by the institutions and providers themselves (for more details on DSH and Medicaid, see Chapter Four – Medicaid and SCHIP in Texas).

While clinics and hospitals may receive some philanthropic support, and physicians may donate some time to provide uncompensated care, these costs are largely borne by local and state taxes and by cross-subsidy from paying patients. In other words, income from private insurance, Medicare, Medicaid and direct patient payments must provide enough operating income so that these institutions can provide uncompensated services, or they would be bankrupted.

Although health care costs continue to rise, Medicare reimbursement does not rise at the same rate as health care inflation, thereby decreasing the capacity for cross-subsidy from Medicare sources. Vigorous negotiations by managed care organizations and insurance companies continue to put pressure on hospital income and limit the cross-subsidy. As a result, pressures are growing to increase local community support of public hospitals, and public clinics continue to grow, particularly in large metropolitan areas.

Consequences to Business

Rising health care costs, coupled with uncertain economic conditions and declining profits, have created new pressure for companies and the people who help manage company health care programs – with no obvious short-term solution. Even companies with rising profits are unhappy with the current situation. In fact, nearly 66 percent of companies indicated that they have experienced significantly more pressure to manage internal costs than in the past (TDI, 2004). The confluence of these factors makes the challenge of providing health care coverage a highly visible and business-affecting issue.

Impact on Employee Wages

At double-digit increases, health care costs are growing faster than employer production and employee wages (TBGH). Costs for most employers are dangerously close to surpassing earnings. This rising cost trend is unsustainable in a market-based economy that is increasingly challenged to compete in a global marketplace; therefore many employers are passing on the high cost to employees through increased co-payments/co-insurance or premiums. Many employers are also looking at high-deductible health plans as a way out of their health care benefit cost and financing dilemma. In addition to higher deductibles, employees' share of their prescription costs have increased 25 percent to 30 percent over the last two years (TBGH). As a result, employees are now bearing 35 percent to 50 percent of the cost of health care through reduced wages, co-payments/co-insurance or higher premiums. If employers do offer "rich" benefits, the impact on wages is viewed by employees as a "pay cut." A 2004 study by Watson Wyatt Worldwide found that employers offering "richer" health care benefits have higher turnover rates.

At the other end of the spectrum, some employers have had to reduce hours or staff to eliminate the cost of providing health care. As a result, the uninsured percentage has jumped to 25.1 percent and the cost to continue coverage through COBRA or individual policies is just not attainable for many. COBRA is a requirement for most employers with group health plans to offer employees the opportunity to temporarily pay for their group health care coverage under their employer's plan if their coverage ceases due to termination, layoff or other change in employment status (referred to as "qualifying events"). Of the 45 million uninsured in America, 46 percent have shopped for health coverage, but only 2 out of 10 have been able to afford to purchase it (TBGH). Children and adults are less likely to receive necessary treatment without insurance, which means the uninsured may be sicker than the rest of us – they cannot get better jobs, and because they cannot get better jobs they cannot afford health insurance, and because they cannot afford health insurance they get even sicker.

Impact on Productivity

Although Americans are now living longer than ever before and population health has increased dramatically over the last century, there are

some areas of concern. For example, obesity has increased 61 percent in a 10-year period and accounts for 27 percent of growth in overall health care spending (TBGH). The prevalence of diabetes has increased 49 percent between 1990 and 2000. As the incidence of disease increases, employer costs are greatly impacted, because illness affects both the quantity of work (people might work more slowly than usual, for instance, or have to repeat tasks) and the quality (they might make more – or more serious – mistakes).

Brown, et. al. (2005) estimate the economic and productivity losses associated with diabetes in the Rio Grande Valley of South Texas to be $228 million per year. Bastida and Pagán (2002) estimated that women with diabetes earn $3,584 less annually than women without diabetes, whereas men with diabetes earn $1,585 less annually than men without diabetes. Brown, Pagán and Bastida (2005) show that men with diabetes were 10.5 percentage points less likely to work than men without diabetes, whereas there were no diabetes-related differences for women.

Because of the increasing need for health care, increased utilization is one of the factors continually driving up costs. Another factor is technology and new drug and treatment development. Pharmaceutical development alone drives increased costs and significantly increased utilization rates. Stress, less exercise and poor eating habits are contributors to the deteriorating health status, but instead of changing behavior, patients rely heavily on the new drugs that treat stress, high cholesterol and blood pressure. In the U.S., increased prescription utilization accounts for 51 percent of the trend (TBGH).

Impact on Absenteeism and Presenteeism

As companies struggle to rein in health care costs, most overlook what may be a $150 billion problem: the nearly invisible drain on worker productivity caused by such common ailments as hay fever, headaches and even heartburn (TBGH). Researchers say that *presenteeism* – the problem of workers' being on the job, but, because of illness or other medical conditions, not fully functioning – can cut individual productivity by one-third or more. In fact, presenteeism appears to be a much costlier problem than its productivity-reducing counterpart, absenteeism. Unlike absenteeism, presenteeism is not always apparent. It is possible to know when someone does not show up for work, but one often cannot tell when – or how much – illness or a medical condition is hindering an employee's performance.

Many of the medical problems that result in presenteeism are, by their nature, relatively benign. Research on presenteeism focuses on chronic conditions such as headaches, back pain, arthritis, gastrointestinal disorders and depression. Progressive conditions such as heart disease or cancer, which require expensive treatments and tend to strike people later in life, generate the majority of companies' direct health-related costs. But the illnesses people take with them to work, even though they incur far lower direct costs, usually account for a greater loss in productivity. This is because they are so prevalent, often go untreated and typically occur during peak working years. Those indirect costs have long been invisible to employers.

Lockheed Martin commissioned a pilot study in 2002 to assess the impact of 28 medical conditions – some serious, some relatively benign – on workers' productivity. Researchers from Tufts-New England Medical Center in Boston found that even employees with less severe conditions had impaired

on-the-job performance, or presenteeism. Table I lists several of the ailments studied; for each one, it includes estimates of prevalence, productivity loss and annual cost to the company in lost productivity (this figure was based on the average Lockheed salary, of roughly $45,000). Together the 28 conditions set the company back approximately $34 million a year. Researchers have found that less time is lost from people staying at home than from them showing up but not performing at full capacity.

While detailed information about the relative roles of insurance coverage or its absence upon these issues is not available, it is clear that the uninsured have a higher prevalence of unmanaged chronic illness than those who have insurance.

Impact on Other Businesses

Employers who do not provide health insurance coverage increase the cost to other employers in the community by steering their employees to take coverage as a spouse under another employer's health plan. Some employers are countering those efforts, as well as the high cost of providing spouse coverage, by implementing spousal surcharges for covering spouses that have the ability to be covered under their own employer's plan. About 8 percent to 10 percent of companies levy spousal surcharges. In general, workers pay $40 to $200 a month more for health coverage if their working spouse takes their insurance and declines their own (NBGH).

A recent survey by the Kaiser Family Foundation says 12 percent of U.S. employers vary in what they pay for family coverage if an employee's spouse is eligible for benefits elsewhere. An additional 11 percent were "very" or "somewhat'' likely to do so this year and next (Hadley, 2002). A 2003 Hewitt survey of 640 large companies said 7 percent required working spouses to enroll in their employer's health insurance program and 32 percent were considering doing so. The survey also found 8 percent required employees to pay more if a working spouse declined their own coverage; 27 percent considered doing so in the future.

Table I—A Presenteeism Report Card

Condition	*Prevalence*	*Average Productivity Loss*	*Aggregate Annual Loss*
Migraine	*12.0%*	*4.9%*	*$ 434,385*
Arthritis	*19.7%*	*5.9%*	*$ 865,530*
Chronic Lower-back Pain (Without Leg Pain)	*21.3%*	*5.5%*	*$ 885,825*
Allergies Or Sinus Trouble	*59.8%*	*4.1%*	*$ 1,809,945*
Asthma	*6.8%*	*5.2%*	*$ 259,740*
GERD (Acid Reflux Disease)	*15.2%*	*5.2%*	*$ 582,660*
Dermatitis Or Other Skin Condition	*16.1%*	*5.2%*	*$ 610,740*
Flu in the past two weeks	*17.5%*	*4.7%*	*$ 607,005*
Depression	*13.9%*	*7.6%*	*$ 786,600*

Source: Debra Lerner, Williams H. Rogers and Hong Chang, at Tufts-New England Medical Center

In the absence of government or private-sector intervention, the erosion of employer-based health insurance coverage will be significant. Steps need to be taken immediately to ensure that the number of uninsured not only does not increase but also is reduced over time. Those steps should be part of a plan to move toward a health system in which everyone has health insurance coverage and should be consistent with the need to restrain the growth in health care costs and improve the quality of care.

Consequences for Mental Health

The Problem

Recent changes in Texas mental health care eligibility requirements and funding have resulted in reduced numbers of treated patients, decreased efficacy of treatment and diminished efficiency of funds allocated for treatment. One in 20 Texans or their family members with a diagnosable mental disorder want and need access to treatment and medications (MHA Houston, 2005a), but approximately 14,000 Texans with mental illness (besides bipolar disorder, schizophrenia, or clinically severe depression) have recently become ineligible for most public mental health services due to changes in eligibility (MHA Texas, 2005). Additionally, Texas is only serving one-fourth of those currently eligible for these reduced mental health services (MHA Texas, 2005). With 3.1 million adults and 1.2 million children at risk for developing some form of mental illness in Texas alone, these provisions are proving highly inadequate.

Texas needs to supply accessible mental health system services to the many mentally ill adults and children who are uninsured and thus cannot find adequate care. In Harris County in 2003, 13,400 of the 25,000 adults who received services from the public mental health system were uninsured. Furthermore, 140,000 of the 500,000 adults with mental illness in Harris County have severe mental illness and 84,000 of these 140,000 have no public or private health insurance and depend only on the public mental health service system for treatment (MHA Houston, 2005b). In Texas, approximately 76,000 adults with severe mental illness were unable to access treatment from the public or private mental health systems. Overall, uninsured, indigent children and adults have the greatest need for publicly funded, state-supported mental health services, but have less access to care (MHNC, 2004).

Unfortunately, lack of accessible effective public mental health services has caused an increase in crisis care for mental health patients. Children and adults without insurance receive little or no service, forcing them to move from crisis to crisis where immediate but not long-term needs are met. Therefore, problems are not being fully resolved, while an increasing amount of money is being spent (MHNC, 2004).

Medicaid/SCHIP Coverage

Publicly funded adult mental health services now only cover bipolar disorder, schizophrenia, or clinically severe depression (with very few exceptions.) Additionally, new eligibility requirements have reduced the effectiveness of the Texas Recommended Authorization Guidelines (TRAG), which assess the mental health service needs of an individual (MHA Texas, 2005).

Because of such restrictive eligibility requirements, Texas can state that 25 percent of its "priority population" is being served. In reality, however, Texas serves only about 12 percent of adult Texans with

diagnosable mental illness and 6 percent of its children with emotional disturbance. The eliminated mental health services from the SCHIP benefit package have left 57,000 children without mental health coverage, and have caused the families of about 250 children per year to give up parental responsibilities in order to ensure that their children can receive the appropriate mental health care from the state (MHA Texas, 2005).

Mental health services that are covered by Medicaid include medications, physician services, psychiatrist-only counseling, rehabilitation services, targeted case management and inpatient psychiatric care (for children younger than 21 and adults over 65.) Additionally, Texans with mental illness who are enrolled in the state's Medicaid program may obtain care from Community Mental Health and Mental Retardation Centers (CMHMRCs) or other Medicaid providers (MHA Texas, 2005).

However, state payments are newly limited to the preferred drug list (PDL) for Medicaid recipients. To receive a drug (which could possibly be the most effective treatment) not included on the list, the patient must first "fail" treatment with a listed drug. Not only is each drug different and therefore non-interchangeable, but neurological damage can result from delays in proper medication, thus suggesting that a preferred drug list could be, in fact, detrimental (MHA Texas, 2005). Further, limiting access to appropriate psychotropic drugs actually increases overall costs 17-fold. This is due to increased hospitalization costs and results in increasingly harming the patient and state by prolonged ineffective treatment.

Health Consequences

Current mental health service practices have negatively impacted the health of those being treated, as well as other patients, families, and children. Minorities are less likely to receive quality care for mental illness-related problems, and children now have a 90-day waiting period for SCHIP services. In addition, when children turn 19, they can find their benefits are gone, because they no longer qualify for federal programs. And, as mentioned above, inadequate drug prescription slows and/or reduces the effectiveness of treatment. Moreover, those patients who are forced to go to emergency rooms have negative effects on other patients, according to physicians (MHA Texas, 2005).

Overall consequences of untreated mental illness manifest themselves in poor school performance, juvenile/criminal justice involvement, unemployment, homelessness and suicide (MHNC, 2004). Specifically, homelessness accounts for 3,900 individuals with mental health problems at any time in Houston, 2,000-2,500 of whom suffer from severe and persistent mental illness (HCHTF, 2004). Those who become unemployed and sometimes consequently become homeless due to mental illness find themselves trapped and distanced from sources and means of help.

Economic Consequences

Cutting mental health care dollars can increase the overall medical costs, because rather than treating the underlying problem, "quick fixes" are being used to treat side-effects (NMHA, 1993). In general, mental illness incurs direct and indirect costs to the state. Direct costs include the operation of public health facilities and the criminal justice system, while indirect costs include employment and earnings, productivity, health care costs and costs to families (MHA Texas, 2005). Overall, the National Advisory Mental Health Council estimates that providing

mental health coverage equal to other health coverage would save $2.2 billion annually in savings for general medical services and reduction in indirect costs such as absenteeism (MHA Houston, 2005a). In 2002, Texas spent $38.36 per capita on mental health, or 44 percent of the national average. This was only 1.5 percent of all state spending, and 75 percent of the national average of 2 percent (MHA Texas, 2005).

In general, there is a loss of productivity from depression and mental illness, resulting from absenteeism and presenteeism, which adds on to the losses due to disability costs, lost earnings and social costs (NMHA, 1993; MIT, 2002; Whitmer, 1999). Employees of six large employers showed that those with depression had medical claims 70 percent higher than the average expenditures for medical problems (such as smoking, high cholesterol and high blood pressure) (Whitmer, 1999). Additionally, medical costs declined by $882 per employee per year when workers with depression were treated with prescription medicines (Coalition for Fairness, 2003).

Another study has shown that employees with depression lose four or more hours per week in productive time than those without depression. In a company of 1,000 employees, this equates to about 19,300 hours of lost productivity per year. Overall, Americans lose 200 million work days to depression each year, costing employers $44 billion in direct treatment, absenteeism, lost productivity and mortality. For depression treatment alone, the savings realized by equalizing mental health benefits could offset the incremental medical plan cost of equalizing mental health benefits for all diagnoses. On average, it costs six times more to treat someone in an inpatient setting than in the community (MHA Texas, 2005).

Criminal Justice Consequences

Inadequate treatment and chronic under-funding of mentally ill patients leads to public costs related to crime and criminal justice, homelessness and uncompensated health care (MHA Texas, 2005). Among these, criminal justice spending included $1.2 billion to $1.8 billion for the mentally ill during 1993-1994 (MHA Texas, 2005). In Harris County, the average cost of a day in jail is $56, or $20,440 per year, and the thousands of inmates with mental health needs cost the taxpayers millions of dollars per year, financed primarily by county property tax. Recently, there has been a 25 percent increase in the budget for anti-depressant and psychotropic medication for the jail system (MHA Houston, 2005).

Because jails and juvenile facilities have become a primary source of treatment for many people with mental illnesses, partnerships between criminal justice and mental health organizations and officials are studying possible forms of community-based treatment. It has been shown to be cost-effective to keep offenders with mental illnesses out of the criminal justice system and provide them with such treatment, partially because they tend to be disruptive in jail and require special housing and more medical treatment. Congress recently authorized $50 million to fund the Mentally Ill Offender Treatment and Crime Reduction Act of 2004, promoting the diversion of non-violent offenders with mental illness from jail (MHA Texas, 2005).

Not only is Texas' mental health care insufficient and undersupplied, but it is also leading to a progressively worse mental health status overall in Texas. New eligibility requirements have further limited access to care, and new practices have led to increased acute inpatient care and restricted prescription drug lists, among other setbacks. Such

constraints have contributed to a high turnover rate in patients, decreased productivity in the workplace, increased spending for recurrent visits to emergency departments, and untreated criminal offenders. This suggests the need for community-based programs that offer housing options and long-term support for gradual treatment and recovery. Only when public mental health care is more accessible and effective and the state is more committed to funding it will patients be treated in a manner beneficial to themselves and the state.

Summary

Altogether, lacking health insurance adversely affects many aspects of a person's life as well as aspects of their communities. An individual without health insurance has reduced access to care, which keeps him or her from receiving adequate check-ups and preventive care. The uninsured are more likely to have diminished quality of life and increased mortality than their insured counterparts. In addition, uninsured people who are mentally ill must rely solely on government programs to receive medications and treatments. As a result, many receive inconsistent care, leading to reduced efficiency of treatments.

The increasing uninsured population in Texas is also negatively impacting the state and local governments. Emergency rooms are overburdened with the increased admissions, and the uninsured constitute a disproportional share of these admissions. This is leading to increases in the costs of health insurance and the overall delivery of health care services. In addition, local taxes must be used, raising rates for individuals and businesses. Health insurance has become a major expense for businesses, which impacts wages as well as the number of employees.

The uninsured rate in Texas has become an increasing problem which requires cooperation and shared responsibility on the state and local levels for resolution. Without changing the current system, the problem of the uninsured will impact not only those directly involved such as hospitals and medical professionals, but also the community at large with increased taxes and reduced businesses and therefore the Texas economy as a whole.

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[Chapter Four]

Medicaid and the State Children's Health Insurance Program in Texas

Medicaid and the State Children's Health Insurance Program (SCHIP) are key programs for providing health insurance and health care to low-income people in the United States. This chapter reviews the current state of Medicaid and SCHIP in the United States and Texas. Contents of this chapter summarize and update a white paper submitted to the Task Force by Warner, et. al. (see Appendix B).

Medicaid

Medicaid is a federal-state matching program established by Congress under Title XIX of the Social Security Act (SSA) of 1965 and administered by the Centers for Medicare and Medicaid Services (CMS) within the U.S. Department of Health and Human Services (HHS). It is an entitlement program created to pay the medical bills of low-income people and increase access to health care. All people who meet the eligibility requirements are entitled to services. Every state (plus Washington, D.C., and five U.S. territories) has a Medicaid program, but since implementation is left to each state, there are variations in the eligibility, benefits, reimbursements and other details of the program among states.

Medicaid pays for basic health services such as inpatient and outpatient hospital care, physician visits, pharmacy, laboratory, X-ray services and long-term care for elderly and disabled beneficiaries. The people eligible for these services are mainly low-income families, children, related caretakers, pregnant women, the elderly and people with disabilities. For additional information on mandatory and optional covered populations and benefits, please refer to Appendix B of this Report.

Cost for the program is divided between the federal government and state governments. The federal share of Medicaid spending was $147.5 billion in the federal fiscal year (FFY) 2002 and $160.7 in FFY 2003. Federal Medicaid expenditures are projected to increase to $177.3 billion in FFY 2004, $182.1 billion in FFY 2005, and $192.2 billion in FFY 2006 (OMB, 2004).

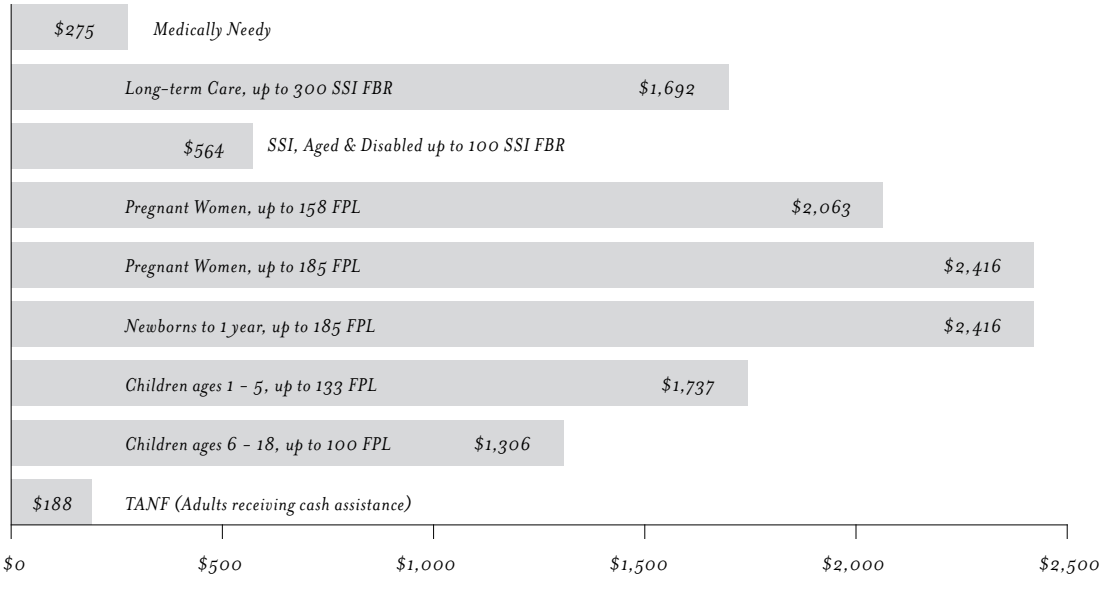
Texas Medicaid Program

Texas joined the Medicaid program in September 1967. Each year, the federal government usually pays a little more than 60 percent of the cost of the Medicaid program in Texas (the exact percentage varies from year to year). For FFY 2004, the federal share in Texas was effectively 62.7 percent, based on basic rate of 60.22 percent with several federal enhancements. Combined federal and state spending for Medicaid in Texas was projected to be $15.5 billion in the state fiscal year (SFY) 2004, not including the disproportional share hospital program (DSH) payments (which add another $1.5 billion as detailed below). This has almost doubled from a budget of $8.2 billion in 1996. The Medicaid budget (excluding DSH) has gone from being 20.5 percent of the state budget in 1996 to 26.1 percent of the budget in 2004. Of the total state Medicaid budget of $17 billion estimated for SFY 2004, 87 percent is for payment of health services, 9 percent is for DSH payments, and 4 percent is for administration (THHSC, 2004a).

As of April 2005, there were 2.9 million people enrolled in Medicaid in Texas (THHSC, 2005a). Beneficiaries must be recertified every six months, at which time adults must renew in person and most children can renew by mail. Continuous eligibility varies: children have it for six months, newborns for one year, and pregnant women until two months post-partum, but all other adults in the program are eligible month by month and must report any income or status changes within 10 days. See Figure 1 for a chart showing various eligibility groups and the monthly income cut-offs to qualify for Medicaid in 2004. Texas Medicaid provides all of the mandatory services (as listed in Appendix B) per federal law, and also provides 36 optional services, 21 of these to all enrollees, and the rest to only children or the elderly. Medicaid beneficiaries in Texas are enrolled in either traditional fee-for-service (FFS) Medicaid or a Medicaid managed care program, depending on their location and other factors.

Texas uses two different models for managed care delivery, health maintenance organizations (HMO) and primary care case management (PCCM). HMOs are licensed by the Texas Department of Insurance and receive a monthly capitation payment for each enrollee based on an estimate of average medical expenses. PCCM is a non-capitated model where each enrollee is assigned a primary care provider (PCP), who must authorize most of the specialty services for the person before they will be paid by Medicaid. The state hires a contractor

Figure 1. Medicaid Eligibility in Texas, 2004
Maximum Monthly Countable Income Limit (Family of Three)



Source: Texas Health and Human Services Commission, Texas Medicaid in Perspective, 5th ed. (2004, p. 4-5), available at http://www.hhsc.state.tx.us/medicaid/reports/PB5/PinkBookTOC.html, accessed March 22, 2005.

Notes: "Countable income" is gross income adjusted for allowable deductions, typically work-related. SSI does not certify families of three, SSI certifies only individuals and couples. SSI is not tied to the Federal Poverty Level, but is based on the FBR, as indicated above.

who sets up the provider networks and contracts directly with them. Reimbursement is fee-for service, plus a small monthly case management fee for PCPs. Over one-third of Texas Medicaid clients have been enrolled in managed care, and nationally, over half of enrollees are in managed care (THHSC, 2004a). In September 2005, PCCM was expanded to the 197 counties that had not been covered by managed care, so Texas enrollment rates in managed care should begin to equal or exceed national rates.

Disproportionate Share Hospital Program

States also get federal Medicaid money for the Disproportionate Share Hospital Program (DSH). DSH provides reimbursement to hospitals that serve a disproportionately large number of Medicaid patients or other low-income people to help compensate them for lost revenues (GAO, 1993). DSH funds are subject to the same federal matching rate as other Medicaid funding. However, unlike regular Medicaid funds, which are open-ended, DSH funds have a ceiling on the total amount for each state. The amount of DSH payments received and their percentage of states' total Medicaid budgets varies widely from state to state (Kaiser, 2002).

DSH payments are an important source of revenue for many hospitals, helping them to defray costs of uncompensated care to indigent, uninsured and underinsured patients. The DSH program is the only Medicaid program where reimbursement does not have to be solely for the treatment of Medicaid patients; it can help reimburse the uncompensated costs of treating uninsured and underinsured patients as well. In SFY 2003, 181 hospitals in Texas received $1.3 billion in DSH payments (federal and state dollars combined). Of these hospitals, 14 were state hospitals, 80 were public, 50 were non-profit and 37 were private for-profit hospitals. The state's matching funds for DSH come from intergovernmental transfers from nine local hospital districts, and state funds from 14 state hospitals (THHSC, 2004a; HSCSHCE, 2004).

Upper Payment Limits

The Upper Payment Limit (UPL) is a program that reimburses hospitals for the difference between what Medicaid pays for a service and what Medicare would have paid for it. While Medicaid cannot pay more than Medicare would have paid for a service, Medicare rates are generally higher, so this difference is called the "Medicaid upper payment limit." The program is separate from DSH and is financed with both state and local funds like the rest of Medicaid. Texas has had a limited UPL plan that makes payments to public hospitals in rural counties under 100,000 population, as well as to the nine large urban public hospital districts (TLC, 2003).

The state gets the state portion of the matching funds through intergovernmental transfers from the nine largest hospital districts that are in the UPL plan. These districts received $24.9 million in additional federal funds in FY 2001 and $105 million in FY 2002. Texas' UPL plan complied with recent federal regulations intended to stop perceived abuses in the program (such as federal matching funds being retained by states for non-health purposes), and went one step further by requiring that all UPL funds received by the state to be used only for higher payments to hospitals or to support medical teaching facilities (TLC, 2003).

State Children's Health Insurance Program

The State Children's Health Insurance Program (SCHIP) was created as part of the Balanced Budget

Act of 1997 and codified into Title XXI of the SSA. It is administered by CMS. It was established to offer health insurance to the large number of uninsured children with family incomes too high to qualify for Medicaid, but who cannot afford private insurance. Every state (plus Washington, D.C., and the five U.S. territories) has implemented SCHIP plans. SCHIP is a grant program with limited funds and not an entitlement program like Medicaid, so states such as Texas that have chosen to create a separate SCHIP program rather than expand children's Medicaid can place caps on the number of children enrolled or enact other restrictions that are not legal in Medicaid.

To qualify for SCHIP, children must be younger than 19, a U.S. citizens or legal residents, not eligible for Medicaid or state employee coverage, not have private insurance, and have a family income below 200 percent of the federal poverty level (FPL) or below 50 percentage points above the state's Medicaid eligibility (CMS, 2000). Families pay premiums, deductibles and co-payments that vary according to their income levels.

SCHIP was appropriated approximately $40 billion by Congress over 10 years. The minimum allocation to each state from these funds is $2 million per fiscal year. SCHIP funds to a state remain available for the state to spend for three years (the fiscal year of the award and the next two fiscal years). Any funds that have not been spent during this period are subject to reallocation by the federal government and possible redistribution to other states that have exhausted their funds (CMS, 2004a). However, Congress has modified and extended these reallocation provisions on several occasions.

Texas SCHIP Program

The current Texas Children's Health Insurance Program began in May 2000. There was a previous program in place from 1998-2002 that was phased out as Medicaid took over coverage of the enrollees, who were aged 15-18 under 100 percent FPL (THHSC, 2004a).

SCHIP is a federal-state matching program with a higher federal share than Medicaid. The federal share for SCHIP is 72.15 percent in Texas for FFY 2004, meaning the federal government gives Texas $2.59 for every state dollar spent (THHSC, 2004a). Texas spent almost $330 million on SCHIP in FY 2004, including both federal and state funds. There has been unspent money left over each year in Texas since the SCHIP program started, and that money has been returned or is projected to be returned to the federal government for redistribution each year since 2000.

Texas cannot use federal funds, provider taxes or beneficiaries' cost-sharing to make up the state share for SCHIP, and states also cannot use SCHIP funds to finance the state match for Medicaid. Texas also has to show a maintenance of effort to receive federal funds: they cannot lower their Medicaid eligibility levels for children from what they had in place on June 1, 1997, and they must maintain at least the same level of spending on children's health programs that they had in 1996 (AAP, 1997). These provisions seek to ensure that SCHIP funds cover the intended target population of uninsured children without states trying to transfer additional children to the program in order to reap the higher federal matching funds.

As of December 2005, there were 322,898 children enrolled in SCHIP in Texas (THHSC, 2005b).

This is down from 507,259 children in September 2003, before cuts by the 78th Legislature took effect (Dunkelberg & O'Malley, 2004). Please see the white paper in Appendix B for the services that SCHIP beneficiaries in Texas can receive. SCHIP benefits last for six months, at which time parents need to send in a renewal form for their children if they remain eligible (THHSC, 2004b). Parents can mail in an application for SCHIP for their children or apply over the phone, and most newly enrolled children must wait 90 days before their benefits can begin (Texcare, 2004).

Beneficiaries pay from $3 to $10 per office visit and $3 to $20 per prescription, though some may be eligible to pay no co-payments (THHSC, 2004b). Monthly premiums for SCHIP were suspended from August 2004 to December 2005. A Governor's Directive was issued on Aug. 11, 2004, to the Texas Health and Human Services Commission (THHSC) to request that it delay the implementation of a plan to disenroll families who had missed three or more premium payments, and to study effective alternatives for cost-sharing. Since it would not be fair for some families to not pay their premiums and still be eligible for services, while others with the same income levels continued to pay, HHSC suspended premium payments (not co-payments for services) for all enrollees (THHSC, 2004c). New enrollment fees effective January 2006 are paid every six months and vary from $25 to $50 (families under 133 percent of the federal poverty level pay nothing) (TexCare).

The Future of Medicaid and SCHIP

Federal

In looking for ways to save money in Medicaid and other programs, the George W. Bush Administration has considered implementing block grants. President Bush's FFY 2005 budget proposed converting various federal programs into block grants, which are fixed amounts of funds that give the recipients (state and local governments) more flexibility in carrying out the programs that are funded. These proposals were not completely new, as a Medicaid block grant, among others, was proposed in President Bush's FFY 2004 budget as well (Finegold, et al., 2004). In these proposals for Medicaid and SCHIP block grants, states would have the option of consolidating Medicaid and SCHIP funds into acute care and long-term care allotments. The amounts would be based on historical Medicaid and SCHIP spending. The amounts would increase annually over current funding by a certain rate in the first years of the block grant, but would decrease in later years to make the block grant budget-neutral over 10 years. The proposal contained certain requirements, such as that not more than 15 percent of funds could be used for program administration, up to 10 percent of funds could be transferred between allotments, and states would still have to provide benefits to currently mandated beneficiaries (Finegold, et al., 2004).

One criticism of the block grants is that the government is overestimating the amount that can be saved with increased flexibility. In addition, block grants do not address the underlying reasons that Medicaid costs are growing, such as the increase in enrollment and rising health care costs. The proposed increase in flexibility includes letting states tailor benefits packages to different populations, increase cost-sharing and cap enrollments. However, the most-used benefits are unlikely to be eliminated, and more cost-sharing and caps on enrollment create inequities for low-income people who may delay getting care if they cannot afford the co-pays. Capping enrollment and getting rid of the entitlement aspect means

that people who would otherwise qualify and may be worse off financially or health-wise than people already in the program could be denied benefits or put on waiting lists just because they register later. Another criticism is that block grants give states an incentive to reduce coverage, because they can keep any savings. Furthermore, block grants take away the monetary incentive to be innovative, because there are no federal matching funds for expansions. They set in stone the spending inequalities of high-income and low-income states and states, such as Texas, with a low base in expenditures that may be faster-growing are disadvantaged (Holahan & Weil, 2003; Families USA, 2003).

Medicaid and SCHIP Waivers and Other Options for Change

Waivers allow HHS to relinquish certain Medicaid and SCHIP laws and regulations, giving states more flexibility in these programs and encouraging experimentation with new approaches to delivering services. There are two broad waiver types, which refer to different sections of the SSA. Section 1115 waivers are called "research and demonstration waivers" and usually involve comprehensive reform projects, while Section 1915 waivers are called "program waivers" and involve waiving specific requirements to allow more innovative programs such as managed care and community-based care. Every state and territory has applied for and implemented at least one Medicaid waiver (HHS, 2001).

Section 1115 Waivers

Section 1115 of the SSA allows HHS to authorize pilot projects in states that want to test new ways to promote the objectives of Medicaid and SCHIP. States can obtain federal matching funds for demonstration projects to pay for more services or extend coverage to more people. Applications must show how projects will help further the goals of Medicaid or SCHIP, and include an evaluation component. Projects are usually approved for five years and may be renewed, and they must be budget-neutral, meaning they do not cost the federal government any additional money (HHS, 2001). Although called "demonstration" projects these arrangements often become permanent. The Arizona Medicaid program (called Arizona Health Care Cost Containment System, or AHCCCS) was introduced under an 1115 waiver in 1982 and through repeated renewals and amendments continues to operate today (CMS, 2004b).

Texas does not have an 1115 waiver. The state applied for an 1115 waiver in August 1995 after studying the options for controlling the state's rapidly escalating Medicaid costs. This waiver would have expanded Medicaid coverage, eligibility and managed care. The waiver was not approved by the HHS for a variety of reasons, and a subsequent smaller 1115 waiver submitted in October 1996 addressing children's health care was later abandoned due to the coming of SCHIP (Kegler, 2002).

Women's Health Waiver

Senate Bill 747 authorizing a demonstration project for women's health care services was passed by the 79th Texas Legislature in May 2005, and the Texas Health and Human Services Commission and the Texas Department of State Health Services developed an 1115 waiver that was submitted to CMS. The waiver states four key elements of the demonstration project, which are to increase eligibility for Medicaid family planning services to women aged 18 and older with a net family income at or below 185 percent of the federal poverty level, to minimize obstacles to enrollment in family planning services, to identify women at risk of cardiovascular

disease and diabetes, and to pilot culturally appropriate outreach efforts to Hispanics. Services to be provided include health evaluation and physical examination, family planning services including education about all FDA-approved methods of contraception except emergency contraception, screening for various diseases and conditions, and referral to an appropriate specialist if needed. Abortions and emergency contraception are not covered. The women's health waiver concludes that the waiver would provide Medicaid family planning services to approximately 1.5 million more women in Texas and that it would result in savings of over $430 million to Texas and the federal government over the five-year waiver period (THHSC, 2005c).

A women's health waiver would take advantage of the 90 percent federal Medicaid match as well as the "cost-beneficial nature of family planning services" to expand women's health and family planning services to millions of low-income and uninsured women at or below 185 percent FPL (Romberg, 2004). Waiver proponents point out that less than 25 percent of the over 4 million eligible women in Texas (at or below 185 percent FPL) receive care because of the lack of affordable care and/or affordable insurance. This is because the Medicaid income eligibility level for non-pregnant women is currently much lower. The waiver is expected to meet budget-neutrality requirements, and to produce significant cost savings, as the costs for services would be offset by savings from otherwise Medicaid-paid prenatal care, deliveries and newborn care.

HIFA Waiver

A new type of 1115 waiver is the Health Insurance Flexibility and Accountability demonstration initiative, or HIFA waiver, announced by the Bush Administration in August 2001. This waiver, applicable to both Medicaid and SCHIP, is mainly intended to encourage new statewide approaches to increasing health insurance coverage, and proposals that meet HIFA guidelines will receive expedited review. Programs should be budget-neutral and maximize private insurance options using Medicaid and SCHIP funds for people below 200 percent FPL (CMS, 2004c).

HHSC submitted an 1115 HIFA waiver to CMS for an SCHIP premium assistance program in December 2004, and if approved, the program could begin in 2006 (THHSC, 2004d). This SCHIP buy-in program, authorized by House Bill 3038 of the 77th Texas Legislature and Senate Bill 240 of the 78th Legislature, would allow state and federal SCHIP funds to be used to pay part of the premiums to enroll eligible individuals into private health insurance plans. Texas already has a premium assistance program in place for Medicaid, called HIPP, or the Health Insurance Premium Payment program (THHSC, 2004a).

Other Waivers

There are three 1115 waivers for city-level demonstration projects authorized by House Bill 3122 of the 78th Legislature that have not been formally submitted to CMS yet,. The HB 3122 Task Force was created through this bill to explore the feasibility of the development of local expansion waivers that would seek to use local funds for the state Medicaid match to draw additional federal Medicaid matching funds to their areas. General outlines of these waivers were submitted for preliminary review, and CMS responded that more discussion would be needed on the proposals, especially on the subject of limited enrollment options (Fenz, 2003). Currently the El Paso County Hospital District, Austin/Travis County,

and Bexar County Hospital District local waivers are under review by this task force. These waivers propose to use the additional federal dollars that the local match would obtain to fund local programs to cover uninsured low-income parents not currently eligible for other programs.

1915 Waivers

There are two types of waivers allowed under Section 1915 of the SSA, 1915(b) and 1915(c) waivers. Section 1915(b) waivers are generally granted for two years at a time and permit states to waive Medicaid's freedom-of-choice requirement regarding providers, thus letting states require enrollment in managed care plans or create local programs not available statewide. The savings from managed care often allows states to provide additional services to Medicaid beneficiaries (such as non-medical support services that are not otherwise covered by Medicaid).

Section 1915(c) waivers let states develop innovative alternatives to institutionalization, and are approved initially for three years, with five-year renewal periods. The waivers allow states to provide home- and community-based services that help keep Medicaid beneficiaries out of nursing homes, hospitals and other institutions in order to maintain their independence and family ties as well as save money. The waivers cover elderly people or people with physical or mental problems who would qualify for Medicaid if they were institutionalized, and the programs must be budget-neutral (HHS, 2001).

Texas currently has five 1915(b) waivers for Medicaid managed care and hospital contracting and seven 1915(c) waivers for home- and community-based services (THHSC, 2004a).

Section 1931

The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA) added Section 1931 to the SSA, which allows states to end Medicaid eligibility to low-income parents who are not receiving cash assistance. States must cover, at a minimum, those parents with incomes below those required in 1996 for welfare, whether or not they receive welfare now, ensuring that those eligible before PRWORA was passed remain eligible. States may also cover those with higher incomes, which a majority of states do. Section 1931 gives states more flexibility to cover low-income people by increasing income and assets disregards and limits. Changes can be made by amending the state's Medicaid State Plan instead of applying for a federal waiver. Enrollments can effectively be capped by changing eligibility criteria and certain benefits for new recipients in case of budgetary pressures, so expansion through Section 1931 does not create an entitlement program. Section 1931 expansions also do not have to be budget-neutral like waivers do (Birnbaum, 2000). Texas has not implemented Section 1931 expansions.

Medicaid and SCHIP Expansion Options for Texas

Besides the current waivers being proposed to expand coverage, there are several other ideas Texas is pursuing or could pursue to expand coverage.

Elimination of Income Disregards/Assets Tests for SCHIP

The 78th Texas Legislature implemented a number of policy changes that led to a decline in the number of SCHIP-covered children in Texas. Among these changes were the elimination of income disregards and the implementation of asset testing. In order to expand coverage Texas could reverse these changes.

Prenatal Care under SCHIP

The definition of "child" for SCHIP purposes was revised by CMS effective Nov. 1, 2002, to include children from conception (instead of birth) to age 19, allowing for an opportunity to extend prenatal care to more women (CMS, 2002; HHS, 2002). Rider 70 of Article II of the state budget passed by the 79th Legislature authorizes the state to expand SCHIP eligibility to unborn children who meet certain criteria, regardless of the eligibility status of the mother, including unborn children of low-income undocumented pregnant women. The benefit and eligibility belong to the unborn child and not the mother, so additional women and unborn children can receive prenatal care and other related services. This will cover women with incomes of 186 to 200 percent FPL who make too much to qualify for Medicaid, plus women at zero to 200 percent FPL who are not otherwise eligible due to immigration status. Medicaid-eligible children will be switched from SCHIP to Medicaid by their first birthdays.

Safety-net hospitals throughout the state already provide prenatal care to some of this population using local dollars, so having SCHIP cover them allows federal matching funds to be obtained to cover a majority of these expenses. This new SCHIP program is projected to cover about 48,000 perinates in FY 2007; about 8,300 would not have had coverage otherwise, and over 39,000 would have been eligible for Medicaid under current rules (Dunkelberg, 2006).

Other SCHIP/Medicaid Premium Assistance Programs

Texas could develop a new public-private partnership model in which a health plan is developed specifically for small businesses. Such plans use either a state-designated board or a private insurer to administer the plan, and the state subsidizes premiums for low-income workers. This model is similar to Maine's Dirigo Health. These plans can, using a waiver, reduce the benefit package, and take advantage of Medicaid or SCHIP funds (Silow-Carroll & Alteras, 2004).

Sections 1931 and 1902(r)(2)

One of the easiest mechanisms Texas could use to expand coverage is to take advantage of Section 1931 and Section 1902(r)(2) of the SSA. As described previously, Section 1931 of the SSA allows states to extend Medicaid coverage to low-income parents with children (above the TANF limits) by income and asset disregards. To expand coverage to these parents, all that is needed is an amendment to the State Medicaid Plan. This method allows the state to later tighten eligibility criteria to scale back expansion if needed and to alter benefits. Similarly, Section 1902(r)(2) allows a state to use less restrictive income and resource methodologies when determining eligibility for Medicaid. This can also be done through a state plan amendment. Both of these options require additional state general revenue (GR) match dollars.

Hypothetical 1931/HIFA

Another expansion option for Texas takes advantage of the flexibility afforded in HIFA waivers to expand to both the 1931 (optional) population and to an additional (expansion) population of non-disabled, childless adults. Basing the HIFA cost savings on a hypothetical 1931 expansion to the full Medicaid package of benefits (that would be more costly to the federal government for less coverage), the state could offer a reduced benefit package to the 1931 population and with the "savings" cover additional childless adults (LBJ, 2003). See Appendix B for more details and estimated costs and impacts of possible alternatives. Also, note that if this waiver

option were implemented, the medically needy spend-down eligibility could be extended to adults not living with dependent children, which could help reduce uncompensated care in hospital emergency rooms and help fund trauma care.

Medically Needy Spend-Down Program

Funding for the Medically Needy spend-down program for parents with dependent children was discontinued in House Bill 2292 of the 78th Legislature (2003). It is inactive with the option of continuing it if sufficient funds are available. Spend-down for pregnant women and children is still in place, which is mandatory for states choosing to have a Medically Needy program. The spend-down part of the program allows temporary Medicaid coverage for pregnant women and children (and before 2003 also included non-aged, non-disabled parents or caregivers with dependent children) with high medical bills who make too much to qualify for Medicaid but whose earnings after medical bills are subtracted would be reduced to qualifying levels. The qualifying level for a family of three is currently $275 in income per month or less, as well as $2,000 or less in assets. Texas' program did not include the blind, disabled or elderly before 2003, so parents/guardians of dependent children were the only group that was discontinued. Non-disabled non-elderly childless adults are not eligible to receive Medicaid under any program, so covering them under the Medically Needy program would require a waiver (THHSC, 2004).

HHSC projects that re-establishing the Medically Needy program would cost $241.3 million in All Funds ($94.9 million GR) in 2006 and $276.4 million in All Funds ($109.2 million GR) in 2007, with costs increasing in subsequent years. HHSC projects that the increase in average monthly recipient months (clients) would be 10,118 in 2006, 10,918 in 2007, 11,796 in 2008, 12,745 in 2009, and 13,769 in 2010 (THHSC, 2004).

Ticket to Work and Medicaid Buy-in

The Ticket to Work Program, established in 1999 through the Ticket to Work and Work Incentives Improvement Act, was designed to support individuals with disabilities in their employment and help with employment retention efforts using infrastructure and demonstration grants to provide Medicaid and other services to eligible individuals. Under this authorization, House Bill 3484 was passed by the 78th Legislature to study the establishment of a Medicaid buy-in program to allow certain beneficiaries in Texas to work without losing their Medicaid benefits. Senate Bill 566 of the 79th Legislature directs HHSC to develop and implement a Medicaid buy-in program for certain disabled people who earn too much to qualify for Medicaid to pay sliding-scale premiums to obtain Medicaid coverage. Working disabled people would have to earn less than 250 percent of the federal poverty level to be eligible. The program could be implemented as soon as September 2006, and is projected to serve about 2,300 people in 2007 (Dunkelberg, 2006).

Covering Legal Permanent Residents

The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA) required states to implement a five-year wait period for legal permanent residents arriving after August 1996 to receive Medicaid or SCHIP. The act left it to the states' discretion whether or not to allow coverage after the five years. To date, Texas has not taken advantage of this coverage expansion option. This option requires only a state plan amendment.

Other Options

Several states including Florida have proposed a fundamental restructuring of their Medicaid programs to control growing costs. The State of Florida submitted a Section 1115 waiver to change its Medicaid program to reduce spending growth, increase predictability of costs, and increase market competition, and CMS approved the waiver in October 2005. The waiver will be implemented as a pilot program in two counties, and will eventually be expanded to cover all beneficiaries and services statewide within five years, subject to legislative approval. Florida Medicaid is currently a defined benefit program, but under the waiver it will become a defined contribution program, where the state will pay risk-adjusted premiums for the coverage option chosen by the beneficiary, including several managed care plans and individual or employer-sponsored insurance, if available. This means that the program is moving away from the concept of shared risk as people will be in different plans and their premiums will be based on estimated individual risk. Managed care plans will now be able to determine benefits for adults, subject to minimum requirements and state approval. A maximum annual benefit limit will be implemented for adults, and if a beneficiary's expenditures reach this amount, the state and insurance plan will not be responsible for additional costs (the amount has not been determined, and pregnant women and children are excluded). Changes such as these could have national implications if more states follow this approach (Kaiser, 2005).

Summary

The federal government has two key programs to address low-income individuals without health insurance under the age of 65: Medicaid and SCHIP. Although both programs have mandated coverage, states are allowed to expand coverage and benefits, often by using one of the waivers provided for by the SSA. In order to address the increasing uninsured population in Texas, the state needs to consider broader use of these waivers, as well as other strategies, to increase enrollment and expand coverage for low-income individuals.

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[Chapter Five]

State Regulation of Health Insurance

The goal of this chapter is to examine the role of state regulation of health insurance in improving access to affordable and adequate coverage. It begins by summarizing those characteristics of the uninsured in Texas. The chapter then discusses the role of states in health insurance regulation and reviews state powers and limitations. This discussion is limited to the regulation of licensed health insurance products. The information found in this chapter was taken from the white paper "State Regulation of Health Insurance: Implications for Health Care Access," which can be found in Appendix F of this report.

Key Characteristics of the Uninsured Population in Texas

Texas leads the nation in the proportion of uninsured working age adults. Even when actual employment status is taken into account, Texas leads the nation in the percentage of individuals without coverage (RWJF, 2005). In data from the U.S. Census Bureau published in 2005, 25.1 percent of all working age adults in Texas were uninsured, compared to 8.5 percent in Minnesota, the state with the lowest percentage (U.S. Census Bureau, 2005). Texas' status persists regardless of state ranking criteria such as race and ethnicity, the presence in the household of children, and employment status.

The Texas dilemma effectively offers a "worst case" scenario of the fragility of the U.S. health insurance system for working age adults and children. For non-elderly persons not yet completely disabled by a condition that prevents work, U.S. policy offers three basic pathways to health insurance: voluntary employer-sponsored benefits, individually purchased coverage, and coverage through a public program (IOM, 2004). Statistics suggest that in Texas the employer market is particularly weak and neither the individual market nor public insurance are sufficiently vigorous to overcome this deficit. If employer-sponsored health insurance coverage rates in Texas were equal to the U.S. average, 2003 coverage rates would have been 6 percent higher (54 percent versus 48 percent). This translates to approximately 1 million additional residents who would have had employer coverage in 2003 (KFF, 2004).

Data prepared by the Texas Department of Insurance (TDI) offer important insight into the characteristics of uninsured Texans (TDI, 2003). The uninsured span all ages, but persons, ages 18 to 44, appear to be at particular risk for lack of coverage (TDI, 2003). Unemployment exponentially increases the risk of insurance among working age adults, but, as noted, the uninsured rate even for employed adults is significantly elevated (TDI, 2003). Immigration status affects coverage rates, but the lack of coverage among native and naturalized citizens also is notable (TDI, 2003).

Certain Texas industries are associated with reduced health insurance coverage (TDI, 2003):

- Construction
- Personal Services
- Entertainment and Recreation
- Agriculture

• Wholesale and Retail Trade
• Health Care Services
• Social Services

Industries associated with low coverage rates typically are characterized by part-time and seasonal employment, cyclical work patterns with frequent layoffs, relatively low cash wages, and limited non-cash compensation (including even basic non-cash compensation such as sick leave). These employment characteristics are recognized predictors of reduced access to employer-sponsored coverage (IOM, 2004).

Furthermore, considerable data suggest that low levels of employer-sponsored coverage are by and large attributable to employers' failure to offer coverage at all, rather than employees' failure to take up coverage that is offered (Hoffman et al., 2004; IOM, 2004). Smaller and lower wage firms face particular challenges in finding affordable coverage and subsidizing the coverage they offer (IOM, 2004). By 2004 only 63 percent of small firms surveyed nationally offered coverage, down from 68 percent in 2001 (Gabel et al., 2004). Cost appears to be the driver, both for the employer and the employee. It is estimated that virtually all of the decline between 1988 and 2001 in employee take-up rates among full-time male workers could be attributed to increases in the employee share of the premium over this time period (Cutler, 2002).

Working age adults not in the labor market face especially challenging health insurance access problems because individual insurance is limited and costly. Non-working adults are more likely to experience elevated poverty and reduced health status, both of which predict coverage rates. Unless they qualify for Medicare or Medicaid, their coverage options may be exceedingly limited, even with insurance market regulatory interventions, such as guaranteed issue and high-risk pools (TDI, 2003).

Taken together, these statistics suggest a weak employer insurance market in the state, compounded by inadequate alternatives to employer-sponsored coverage. This is attributable to the cost of coverage in relation to employee compensation and family income. TDI cites the total average monthly cost of employer-sponsored family coverage exceeds $800, while the cost of single coverage hovers at the $300 mark (TDI, 2003). For older persons in poor health and dependent on the individual market, the monthly figure is much higher. Even for younger workers with no serious conditions, coverage under a limited individual plan can exceed $200 (post-tax) monthly with no employer contribution.

In view of the relationship between family income and health insurance coverage, the extent to which regulatory intervention alone can open up a market and/or make it more affordable becomes the central question. Even the most energetic proponents of a market driven approach assumes subsidization through tax credits (Pauley, 2005). In the absence of a subsidy program, expectations from regulation alone may be modest. A more appropriate way to approach the issue might be to consider which regulatory interventions, in combination with subsidies, might do the most to aid the market.

Two basic types of regulatory interventions are relevant: interventions aimed at creating more affordable and attractive employer-sponsored benefits and interventions aimed at strengthening the individual coverage market. The underlying drivers of insurance costs are a consideration when assessing the relative value of interventions into the individual and group market.

The United States depends on a voluntary coverage system. In this system, the cost of coverage is generally higher due to adverse selection (Merlis, 2005). Employer coverage helps mitigate higher costs because of the worker profile, enrollment constraints (i.e. timing), and incentives for healthy workers paid by the employer.

Regulatory models aimed at building the individual system will have limited impact without heavy subsidies, or they must strive to replicate the market characteristics of voluntary group products.

The Role of States in the Regulation of Health Insurance

The assessment of state regulatory powers in the health insurance market must consider two fundamental factors underlying the basic architecture of the market: pooling and design.

- *Insurance pooling* Who enrolls in an insurance pool greatly affects the market. The greater the proportion of younger, healthier members, the lower the cost of coverage for the group as a whole.
- *Coverage design* Health insurance coverage design considerations are complex and intricate. Coverage can be limited or comprehensive in design in terms of deductibles, coinsurance, copayments, the application of annual and lifetime maximum coverage limits, and the presence of stop-loss on out-of-pocket payments for covered benefits. Beyond these factors, design involves other considerations: the classes and categories of covered benefits and array of services and procedures covered within each class; applicable limitations and exclusions on coverage; the use of waiting periods and pre-existing condition exclusions to apply post-enrollment coverage limits on specific services; the rigor of certain key terms and definitions such as "medical necessity;" and the scope of discretion accorded insurers to make final and binding coverage determinations with broad discretion to construe the terms of the agreement (Rosenblatt et al., 1997).

Any assessment of state health insurance regulatory options in the context of enrollment and design inevitably brings into sharp relief the paradoxical nature of insurance regulation: as state regulators use their powers to expand and improve coverage, costs may rise for persons who are already adequately covered members of the insurance pool. These concepts of using regulatory powers to broaden and strengthen insurance pools are sometimes referred to as risk solidarity. These types of regulatory interventions tend to generate fierce opposition from the insurance industry.

The Legal and Political Limits of State Insurance Regulatory Powers

Under principles of U.S. law, states play the primary role in regulating health insurance (Rosenblatt et al., 1997). However, there are a host of federal laws with a limiting and pre-emptive effect on state insurance regulatory powers. The Employee Retirement Act of 1974 (ERISA) governs virtually all benefit plans offered by private employers. While ERISA pre-emption principles "save" state laws that regulate insurance, self-insured employer-sponsored health plans are not considered "insurance" (GAO, 2003a). Of the 11.4 million Texans with some form of private coverage, 5 million are members of self-insured plans (TDI, 2003).

Other federal laws have a similar pre-emptive effect. Depending on the state's labor patterns, federal law may have a considerable impact on limiting a state's power to affect insurance regulation.

Two important examples of other pre-emptive laws are TriCare and the Federal Employee Health Benefit Act, both of which regulate insurance sold or furnished to the federal, civilian, and military workforce. Another relevant example of preemptive law is Medicare standards for insurance products sold to beneficiaries.

Federal law also directly affects certain state insurance regulatory practices. The most important of these laws, the Health Insurance Portability and Accountability Act of 1996 (HIPAA), establishes minimum federal standards for state regulated insurance markets in several critical areas, all of which may affect coverage costs to some degree. HIPAA requires state licensed health insurers to make their small group products available to all small employers (i.e., employers with between 2 and 50 employees) regardless of their claims experience or employee health status (Claxton, 2002). HIPAA does not regulate the rates that can be charged for these products, although many states regulate rates in the small group market (Claxton, 2002).

HIPAA also requires state licensed insurers to accept persons transitioning from group to individual coverage and who meet a series of strict conditions, such as ineligibility for any other coverage and continuous coverage in the group market for at least 18 months (Claxton, 2002). Persons protected under these transitional rules are known as HIPAA-eligible persons, because they are considered to have continuous and "creditable" coverage prior to entering the individual market. They also must have exhausted their group continuation coverage (known as "COBRA" coverage) and must apply for individual coverage within 63 days of leaving group coverage (Claxton, 2002).

In addition, HIPAA requires licensed insurers to guarantee renewal of coverage sold to multiple employers, although the level of the renewal premium is left to insurer discretion (Claxton, 2002). Finally, HIPAA prohibits discrimination based on health-related factors in rates charged to members of an employee group (GAO, 2003b).

The extremely fragmented and segmented nature of the health insurance market, coupled with a raft of pre-emptive statutes, poses both financial and legal challenges to states. Even where state regulators can access employer plans, as with products sold by licensed health insurers, insurers may strongly resist regulation to avoid what they perceive as changes that will affect both their employer-insured and self-insured markets.

An important consideration is one sizable group of insured residents who are members of a pool fully accessible to state regulation, either directly or indirectly, depending on the legal structure of the relationship between state and local government. This group consists of residents who are public employees of a state, its localities, and the governmental units and instrumentalities of the state. The size and range of this group in Texas is considerable. If state regulators were to use this large pool of relatively healthy workers and their families as the basis to more broadly restructure the group and individual markets, the impact might be substantial. However, reforms based on public employees may have more operational and political constraints than legal ones.

An Inventory of State Insurance Regulatory Powers

State insurance laws essentially are designed to accomplish three basic goals:

1. Ensure financial standards for licensure that guarantee the stability and solvency of insurance products.
2. Ensure appropriate market conduct and guard against marketing fraud or unfair business practices.
3. Regulate the accessibility, affordability, structure, and content of licensed products.

The third power of state regulators is most relevant to this analysis. All states have laws that fall into all three categories; however, state laws vary enormously in their scope, range and specific requirements. Some states, such as New York, tend to be cited in the literature for their comparatively regulatory approach to insurance; other states, (notably Texas) tend to be identified as states that engage only in limited regulatory practices (GAO, 2003b). Whether these regulatory differences account for most, or even much, of state-to-state variation in the cost of health insurance is not known. Numerous factors (such as the underlying cost of medical care, the insurance markets in particular states, the nature of the industry operating in any particular state, and even the unique health care culture of states with coverage) play important roles in determining the cost of coverage. It is worth noting again that TDI insurance costs parallel national norms. To the extent that Texas falls into the deregulated end of the regulation spectrum, this fact does not seem to have produced major cost differences (TDI, 2003).

Three basic classes of licensed health insuring organizations can be found in most, if not all, states: commercial insurers; Blue Cross and Blue Shield plans (which may or may not continue to operate as non-profit organizations as opposed to licensed insurers); and health maintenance organizations (HMOs) (Claxton, 2002). State regulatory activities may be aimed at one, two, or all three license holders, which in turn may sell in both the group and individual market. Regardless of their licensure category, all three classes of insurer share an interest in attracting a coverage pool that parallels the general population and is not disproportionately comprised of adverse risks. Insurers also may segment their markets by both purchaser (individuals, small groups, large groups, and trade associations) and by product type (e.g., different products made available to specific markets). Common factors used to segment the market are age, occupation, gender, health status and geographic location (Claxton, 2002).

Insurers also may use underwriting to keep pools stable. Underwriting is the process by which insurers accept applicants for coverage and set the terms and price of coverage. Even when state laws require an insurer to accept applicants in the small group and individual market, companies may have broader underwriting discretion in setting the coverage terms for enrollees. These terms are part of the product design (itself) and offer insurers additional safeguards against adverse selection.

States typically exercise various types of regulatory powers over health insurance products. These powers have been concisely chronicled by Gary Claxton, an expert in health insurance regulation. He also notes that the exercise of these powers varies considerably by insurance product and by state (Claxton, 2002).

Premium Regulation

States can regulate premiums in numerous respects. They can establish "rate bands" that limit the discretion of insurers to adopt wide ranges between the lowest and highest premiums charged for the same product. Rate band laws can be limited or broad in scope and may set strict or limited ranges (e.g., restricting the highest rate to no more than 150 percent of the lowest rate for the same product.) Premium regulation also can consist of community rating standards, which can be strict or modified to permit some variation in the rates. States also may establish "loss ratios" to ensure a reasonable ratio of benefit payments to premiums charged. Regulation of loss ratios acts both as a check on premium costs and as an indirect form of benefit design regulation.

Medical Underwriting

The state also may regulate the extent insurers can engage in medical underwriting, either at the point of application or following enrollment as a means of limiting adverse selection. Medical underwriting is particularly common in the individual market. Medical underwriting can lead to high levels of applicant rejection rates and a very limited number of "clean offers", (e.g. offers without a host of riders and exclusions limiting the terms of coverage) (Merlis, 2005; Pollitz et al., 2001). Similar to premium banding, the regulation of medical underwriting practices is distinct from direct regulation of how much can be charged to any particular purchaser (or group of purchasers) for any particular product.

Renewability and Guaranteed Issue

Renewability is designed to ensure that an individual or small group purchaser is not denied contract renewal at the end of a coverage term. Guaranteed issue is designed to ensure initial access to the market. HIPAA regulates guaranteed issue for transitioning small employers and individuals who are HIPAA-eligible. Since HIPAA does not regulate rates, neither renewability nor guaranteed issue alone ensures affordable rates.

Coverage Continuation

Under federal law (COBRA), states frequently require insurers to allow former members of a covered employee or association group to continue coverage under certain circumstances. In this sense, COBRA, like many federal laws, represents an evolution of state insurance law.

Benefit Design

All states regulate benefit design to some degree and require benefits to be specified. A 2001 GAO study found that Texas fell into the group of states with the highest number of mandates. However, the study did not appear to group mandates by anticipated cost, and grouped all forms of mandates (small group, large group, and individual market) together (GAO, 2003b).

Review and Appeals

An insurer's discretion to make final and non-reviewable decisions is typically the subject of state regulation, with all states permitting some level of review for at least certain types of denials.

HIPAA's Provisions in Context

HIPAA represents an effort on the federal government's part to set minimum standards for non-group products. Beyond the issue of portability for persons transitioning from group to group or from group to individual markets, HIPAA requires guaranteed issue for persons who are "HIPAA-eligible.") These are persons with group coverage who are transitioning without significant break in "creditable

coverage" from the group to the individual market. HIPAA permits states to choose between requiring their insurers to offer guarantee issued products or establishing an alternative approach, such as high-risk pools. The critical issue is that HIPAA protects only persons transitioning from group to individual markets, not individuals seeking individual coverage for the first time. Furthermore, individuals who experience a break in "creditable coverage" (e.g., who cannot pay their COBRA continuation premiums) lose their HIPAA guaranteed issue protections.

HIPAA's guaranteed renewal provisions are more generous than its limited guaranteed issue protections. Regardless of an individual's HIPAA eligibility status, HIPAA protects against denial of a renewal. But as noted previously, HIPAA does not regulate the rates that are charged upon renewal, just as it does not regulate guaranteed issue rates.

State Intervention in the Individual Market

Over the past 20 years, states have begun more actively regulating the small group market (employers between 2 and 50 persons; in some states, the self-employed are treated as a small group) (GAO, 2003b). A few states have begun to apply regulatory tools to the non-group (i.e., individual) market, but these incursions are often quite controversial because of their impact on lower risk individual purchasers (GAO, 2003b).

Table I summarizes Texas' regulations in the non-group market as of April, 2004. In some states, the level of regulatory protection exceeds minimum HIPAA requirements. A more detailed list of options from other states can be found in Appendix F. Texas has opted for few of these added protections. One important "HIPPA +" protection is a "guaranteed issue" rule that protects all applicants, HIPAA-eligible or otherwise, but this protection is rare (5 states only – Massachusetts, Maine, New Jersey, New York and Vermont). Twelve states, excluding Texas, provided at least a limited additional level of guaranteed issue protection for certain classes of non-HIPAA qualified persons. Some states have elected to make guaranteed issue a rule for self-employed persons (as well as) and small groups; Texas did not extend this protection.

Table I – Summary of Key Consumer Protections in Texas' Health Insurance Markets (April 2004)

Guaranteed Issue	*All Products/ Carriers/ Residents*	*No*
	Other Protections	*No*
Preexisting Conditions	*Elimination Rider Permitted*	*Yes*
	Maximum Exclusion Period/ Lookback Period (months)	*24/60* *0/0 (HMOs)*
	Credit for Prior Coverage Required	*Yes, if 18 months of creditable coverage*
Rating Restrictions	*Community Rating (Pure or Adjusted)*	*No*
	Health Status Rate Band	*No*
Other Options	*High-Risk Pool*	*Yes, with rate limits*
	Mandatory Group Conversion Required	*No*
	Self Employed Individuals Guaranteed Issue Small Group Plans	*No*

Source: Georgetown University Health Policy Institute

A much larger group of states offers conversion coverage. Conversion coverage differs from HIPAA portability protections because it covers persons who may not meet HIPAA qualification standards. A conversion rule requires an insurer to offer an individual product to a person losing coverage under a group plan offered by the insurer. Texas offers a high risk pool, but does not offer conversion protection. While many states establish conversion protections, very few regulate the rate that can be charged for a conversion policy.

Some states offer continuation coverage for persons employed by firms not covered by COBRA protections that employ fewer than 20 persons on a full-time basis. With respect to regulation of exclusionary provisions and premiums, Table I also shows that Texas has not elected to pursue options used in some states in the non-group market. About one-third of all states either totally or partially restrict the use of post-enrollment exclusion riders based on underwriting. Texas does place limits on the period of time that insurers can "look back" in setting exclusion riders, but limits this protection to HMO enrollment. The state also limits individuals who can benefit from this "lookback" protection to persons with HIPAA-creditable coverage.

Direct rate regulation is, of course, the most far-reaching form of regulatory intervention, since it directly affects the rate that an issuer can charge. The rate spread between high and low risk enrollees in any particular product can be enormous. While rate banding and rate restrictions would make coverage affordable to persons with higher risks, it would also elevate the price for lower risks. Furthermore, as rates for the lowest risk enrollees rise, the rates at the highest end would fall, but not always appreciably in context with affordability. Rating restrictions could send products into a death spiral, as the lowest risks abandon the pool because of the rate increase (GAO, 2003b). Compulsory membership with tax subsidies might avert this result.

Many states, including Texas, have established high risk pools as of 2003. Because these pools cover very high risk persons, exceedingly high individual premium payments must be supplemented (typically by an assessment on insurers) to meet the coverage costs. Even this assessment (typically 1 percent) may not be enough to make coverage affordable. In order to avoid outright rate regulation, states supplement with group insurance assessments. Whether ERISA would pre-empt a similar assessment on self-insured group health plans is an issue that has never been litigated. In order to avoid a direct assessment on an ERISA benefit plan, the Maryland State Legislature recently placed an assessment on large employers whose health expenditures for workers fall below a certain threshold.

Finally, creating a broader insurance pool that extends well beyond high risks and includes large numbers of healthy and well-covered individuals might have an impact. A state could use its own public employee pool as the basis for such an intervention, with regulation of rates and premiums pegged to the pool. Of course, this type of intervention is beyond the traditional limits of state regulatory powers and would require a fundamental rethinking of the relationship between small groups, and individuals and public employee pools.

One approach highly dependent on federal law is small group market reforms. Federal legislation to establish "Association Health Plans" would exempt such plans from state insurance regulation, just as self-insured ERISA plans are exempt. Proponents

argue that pre-emption of state insurance laws regulating products sold to small groups would help reduce the cost of coverage, although there appears to be no definitive evidence to confirm this viewpoint. Opponents argue that the legislation would pre-empt more active state efforts to make small group coverage more affordable and accessible (GAO, 2003b).

More Active State Intervention in the Small Group Market

Texas is one of 47 states that in 2003 maintained some restrictions on rate setting in the small group market. Texas uses a rating band approach, which allows for variation within limits in premiums among types of small businesses based on factors such as age, group size, and industry. Twelve states use either pure or modified community rating, which prohibits the use of health status to set premiums. This ensures greater affordability for small firms with sicker employees, while potentially elevating rates charged firms with healthy employees during a particular contract year.

Texas, like 40 other states, required insurers to offer continuation coverage to former members of employer groups of fewer than 20 full-time employees (state COBRA). However, Texas did not elect to tighten HIPAA standards regarding the use of pre-existing condition exclusions. HIPAA limits these exclusions to 12 months, and some states have established shorter periods.

Hybrid Insurance Products

Individual coverage typically is subject to high deductibles. Hybrid insurance products offering health savings accounts coupled with high-deductible plans may be relevant to increase coverage in the small employer group market where affordability is a major barrier. Growth of these products in the employer group market has been slow, although employer interest may increase as costs continue to escalate. (Fuch & James, 2005). Whether a state would want to take aggressive steps to encourage a more robust market for this type of hybrid product is worth considering. The introduction of such a product into the group market could further segment existing coverage arrangements and elevate premiums for higher risk individuals. Without a companion initiative to stabilize premium rates for small groups with higher risk individuals, these hybrid products carry risks that may ultimately impact coverage affordability for the highest risk state residents (Kofman, 2004). It is also unclear whether the lower rates for hybrid products would be sufficiently low to attract large numbers of small low wage firms. Even if these products are appreciably less expensive than standard insurance, firms may find they cannot afford even lower rates of incremental compensation associated with offering subsidized high deductible health products.

Summary

Texas' extensive health insurance problem appears to be primarily attributable to the weakness of the state's employer-based insurance system for workers and their families. Many factors dictate the strength of employer-sponsored insurance markets, and an assessment of their relative contribution to the state's insurance dilemma is beyond the scope of this chapter. Even if the state pursued Medicaid expansions and encouraged a far more dynamic individual market (one quite limited at best, based on national individual coverage estimates), the coverage shortfall produced by a weak employer market is still too great. Reforms that stimulate greater employer participation appear to be a critical part of the challenge.

The ability to stimulate and increase employer participation appears to be directly related to the degree to which the employer views the coverage as affordable. Aside from direct financial subsidies to employers and employees, there are regulatory interventions worth considering. One intervention is the use of premium controls, such as modified community rating that eliminates rating based on health experience. Another might be to place smaller employers into larger pools by restructuring the public employee system to include smaller groups. In this way, the state might create a single and very large "state purchasing group" to give small employers the benefit of a far larger group membership with more choices and better rates. Enlarging the group also would make the concept of using a modified community rating system more feasible.

Furthermore, Texas has made only modest use of its power to regulate products purchased in the non-group market when compared to other states. Most notably, the state does not appear to have extended certain basic protections to self-employed individuals that are in use in other states. Texas also does not provide basic conversion protection or other bridging arrangements for persons losing group coverage who do not qualify for HIPAA protections. Finally, Texas does not offer the premium controls and cross subsidies available in other states.

Whether a more aggressive approach to regulation and pooling reform would significantly alter the insurance picture in the absence of considerable subsidization is not certain. States with radically different insurance patterns have different experiences for many reasons that affect their willingness to regulate the market. At the same time, certain reforms in the individual and small group market are worthy of consideration, as is a more comprehensive approach to create a "state purchasing pool" using the state's considerable power to affect market conditions through the purchase of health benefit plans for public employees.

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[Chapter Six]

Analysis of Reform Options Developed by Other States

States have significantly different levels of health insurance coverage due to differences in incomes, structure of employment (some states have more high-wage manufacturing and are more highly unionized), generosity of Medicaid and State Children's Health Insurance Program (SCHIP) eligibility levels, and even age. De-linking Medicaid from welfare in the 1980s opened up the possibility for some states to expand public health insurance coverage. Due to the relative prosperity of the 1990s, some of the impact of the Health Insurance Portability and Accountability Act of 1996 (HIPAA), and the incentives afforded to states to expand children's coverage through SCHIP, a number of states were able to push their uninsured rates to nearly 10 percent or less. The economic slow-down since 2000 has had an impact on a number of states and led to cutbacks in SCHIP and Medicaid, and in some of the more innovative partnerships developed with private insurers and providers.

This paper summarizes some of the issues and options in health insurance coverage, and lists innovations adopted by several states in recent years to extend health insurance coverage to more people. Various aspects of health insurance coverage in Texas are studied, including demographics, Medicaid, SCHIP, small group incentives and private insurance regulation. Five states with different programs and varying levels of uninsurance, Maine, Florida, Arkansas, Colorado and Minnesota, are presented to examine the methods they have used to extend coverage. This paper concludes with some options that might work in Texas. Texas has the highest uninsurance rate in the nation, so multiple initiatives will likely be needed to address the problem. This paper is an abbreviated version of the white paper "An Analysis of Reform Options Developed by Other States" by Warner et al. found in Appendix C.

Issues and Options for Extending Coverage

States have adopted a number of strategies in recent years in an attempt to extend or guarantee health insurance coverage to those who cannot otherwise obtain it. It is difficult to determine to what extent each of these strategies might reduce the number of uninsured, since more than one initiative is usually in place and working in tandem where these have been implemented. They are also subject to outside factors in the larger political and economic climate that affect industries, employment and insurance.

- *Develop premium assistance programs for an employer buy-in program for employees or dependents through SCHIP and Medicaid.* Six states currently have an SCHIP employer buy-in program (including one inactive), which lets SCHIP funds be used to help pay for employer-sponsored plans for eligible people when they have access to one and if enrollment would be more cost-effective than enrolling them in SCHIP (SCI, 2005a). Ten states, including Texas, have Medicaid Health Insurance Premium Payment (HIPP) programs. These programs are employer buy-in programs for Medicaid-eligible people with access to employer-sponsored insurance. They pay for premiums, coinsurance and deductibles, but only when proven cost-effective for the state (SCI, 2005a).

- *Allow families who do not qualify for SCHIP to buy SCHIP coverage at full price for their children.* Four states have a full-cost SCHIP buy-in program, including Florida, which lets higher-income families buy SCHIP coverage for their children at full premiums with no state subsidy (SCI, 2005b).
- *Establish reinsurance pools to partially subsidize small group insurance coverage or improve individual access to coverage.* Reinsurance pools are different from high risk pools in that they protect insurers from bearing the full cost of insuring individuals with high expenses. Reinsurance pools assume a portion of insurers' high-cost claims for individuals and/or groups, as well as help stabilize the market. At least 21 states have reinsurance pools, though many have very low enrollments or are inactive. Florida and Texas have active reinsurance pools, and Colorado and Minnesota have inactive ones (Chollet, 2004).
- *Pass legislation that permits the sale of limited-benefit policies that exclude a number of state-mandated benefits.* This lets insurers and thus employers offer lower-cost, less comprehensive insurance. The plans exclude some benefits and have high deductibles, limits on the number of doctor visits, and/or annual caps. Unfortunately, enrollees could develop serious medical conditions that exceed the coverage limits. At least 11 states have enacted or are considering legislation to allow insurance companies to sell limited-benefit policies to small groups, including Colorado, Florida, Minnesota and Texas (Friedenzohn, 2003). Texas law requires that all insurers that offer small-group coverage also offer limited-benefits policies. As of December 31, 2004, these plans had 14,000 enrollees in Texas, including 4,000 who were previously uninsured ("Insurers, enrollees," 2005).
- *Implement pared-down benefit packages for Medicaid or SCHIP expansion populations under HIFA (Health Insurance Flexibility and Accountability) waivers.* The HIFA demonstration initiative is to encourage new comprehensive state approaches that will increase the number of individuals with health insurance coverage within current-level Medicaid and SCHIP resources. This approach is being further refined by the U.S. Department of Health and Human Services and HHS Secretary Mike Leavitt.
- *Allow group insurance purchasing arrangements or "pools" for small employers.* These pools seek to combine purchasing power and negotiate lower rates from insurance companies or health maintenance organizations (HMOs). The pools can be run by a state agency or established by individuals or employers, and may be for-profit or not-for-profit (Kofman, 2003). It is difficult to determine the exact numbers of these pools since there are different types and they do not have to register with any one authority. Texas used to have a state purchasing pool, and currently has several private pools. Small employers generally express interest in purchasing pools, but insurers are often not interested in working with them, as they fear adverse selection. (TDI, 2004).
- *Establish state-operated high-risk pools for people whose pre-existing conditions and medical costs make it impossible or too expensive for them to obtain coverage in the private market.* Funding for high-risk pools comes from government revenue or assessments on insurers. Thirty-two states operate high-risk pools, including Texas, Arkansas, Colorado, Florida and Minnesota (SCI, 2005c). The Texas program has increasingly become unaffordable for many, as the premiums have been increased to the maximum permissible.
- *Establish mandates for employers to provide health insurance.* Hawaii is the only state with an employer mandate currently in force. California passed the Health Insurance Act of 2003 in October 2003, but this example of a "pay or play" mandate was defeated by voters in a referendum in November 2004.

- *Establish state-only tax incentives that provide a tax deduction or credit to employers and individuals who purchase health insurance.* Fifteen states including Maine and Colorado provide tax relief in one of these ways. Many of these states offer credits or deductions to the self-employed or individuals (and their spouses and dependents), while several offer them to small groups or other employers. Beneficiaries do not have to have low incomes to qualify for most tax incentive programs as long as they meet eligibility criteria (SCI, 2005d).
- *Regulate insurance rates for small groups.* Rates for small groups can vary widely depending on the characteristics of individual employees in the group since they are subject to individual underwriting (discussed in more detail in Chapter 10 "State Regulation of Health Insurance"). Insurers can have quite a wide rate band for small employers. Rates are calculated on the anticipated risks of each individual, and thus insurance rates for small groups can vary significantly based on the factors of one or a few individuals in the group with higher risk (TDI, 2004). The most extreme example of regulation is community rating, where no adjustments for risk are allowed between different types of people, so everyone in a community pays the same rates, as implemented in New York State. Under modified community rating, insurers cannot vary premiums based on health status but can still use other factors like age and sex. In 2003, 47 states had regulations following one of these types of requirements, though the specifics of the regulations can vary widely. These included 35 states with different types of rate bands (including Texas), 10 states with modified community rating, and two states with pure community rating (GAO, 2003).
- *Implement guaranteed issue for individual policies.* Guaranteed issue describes insurance coverage that must be issued regardless of health status. Only four states (Massachusetts, Maine, New Jersey and New York) have guaranteed issue for all individual insurance policies, though a number of other states have more limited forms. These include guaranteed issue for certain types of policies, by certain carriers, or for certain people such as HIPAA-eligible people (GUHPI, 2004). To be considered HIPAA-eligible, people must meet all the criteria set forth in the HIPAA legislation, such as not having other insurance, not being eligible for Medicaid or Medicare, and using up all COBRA benefits if offered (AIFS, 2005). COBRA is a requirement for most employers with group health plans to offer employees the opportunity to continue temporarily their group health care coverage under their employer's plan if their coverage ceases due to termination, layoff or other change in employment status (referred to as "qualifying events"). Some feel that guaranteed issue without price controls or mandating coverage for everyone can be harmful, because it encourages people to seek insurance only when they think they will need it. This creates adverse selection and forces prices up, which causes more people to drop insurance, resulting in only the sick having insurance (CAHI, 2002; Garrett & Bradley, 2003).

Not all of these initiatives will work well in every state. Factors such as income levels, age distribution, number of immigrants, level of unionization, availability of public programs, and availability of employer-sponsored insurance influence the unique problems of each state's uninsured population and which solutions might be more appropriate and effective.

Innovations in Other States

Several states have developed their own unique or uncommon solutions to expand insurance. Some of these ideas are somewhat radical and may not work in other states for demographic or political reasons, but an overview of some of these initiatives could prove useful when considering creative options. New York State has passed a variety of proactive health insurance reforms, including guaranteed issue, community rating, and reinsurance plans. Eight states have obtained 1115 waivers to cover uninsured parents of SCHIP-eligible children. Utah received an 1115 waiver in 2002 to expend a limited Medicaid benefits package to low-income, previously ineligible adults. Maryland established a hospital cost containment program in 1974, setting rates for hospitals. This resulted in Maryland hospitals changing from the most costly to the most effective in the U.S. Details on these initiatives are available in the white paper in Appendix C.

Profiles of Selected States

It is useful to compare and contrast Texas to other states that differ in terms of income, percent uninsured, eligibility levels for public program, population and other factors. All of these states have used various means to reduce their uninsured rates. Florida, Arkansas, Colorado, Maine and Minnesota were chosen for different characteristics of their health insurance landscapes. These may not be similar to Texas, but a study of them can be helpful in terms of considering what might or might not work in Texas and why, or such questions as why poorer states like Arkansas and Maine have higher insured rates than Texas. Table I describes the demographic characteristics of the selected states. For comparison across the states, Medicaid eligibility criteria are presented in Table II, Medicaid financing strategies are in Table III, and characteristics of SCHIP eligibility for the selected states are in Table IV.

Table I: Demographics of Selected States

State	*2003 Population*	*Median Household Income*	*100 FPL*	*100–199 FPL*	*ESI*	*II*	*Medicaid*	*Medicare*	*Uninsured*
Texas	*22.5 million*	*$40,934*	*22%*	*22%*	*48%*	*4%*	*13%*	*9%*	*25%*
Arkansas	*2.6 million*	*$33,259*	*22%*	*22%*	*46%*	*5%*	*17%*	*15%*	*17%*
Colorado	*4.6 million*	*$50,224*	*13%*	*17%*	*58%*	*6%*	*11%*	*9%*	*17%*
Florida	*16.6 million*	*$38,572*	*17%*	*20%*	*48%*	*6%*	*12%*	*16%*	*18%*
Maine	*1.3 million*	*$37,619*	*15%*	*20%*	*51%*	*5%*	*18%*	*15%*	*11%*
Minnesota	*5.0 million*	*$54,480*	*9%*	*15%*	*65%*	*6%*	*10%*	*10%*	*8%*

Abbreviations: FPL– % of Federal Poverty Line; ESI– employer–sponsored insurance; II– individual insurance

Source: Kaiser Family Foundation, State Health Facts, available at http://www.statehealthfacts.org, accessed April 1, 2005. (Their source for the insurance data was the March 2003 and 2004 Current Population Surveys, conducted by the U.S. Census Bureau and based on self–reported data.)

Notes: Median Household Income is a yearly average from 2001–2003. Insurance categories may not add across exactly to 100 percent due to rounding, but they are intended to represent all insurance types. Medicaid/SCHIP category also includes military, veterans, and other types of public insurance, as well as people eligible for both Medicaid and Medicare. The Medicare category represents people with only Medicare, as well as people with Medicare plus private insurance.

Table II: Medicaid Eligibility for Selected States

State	Eligibility Constraints	Pregnant Women	Nonworking Parents	Working Parents	On SSI	Children 0–1	Children 1–5	Children 6–19
Texas	TX does not extend Medicaid via COBRA 1986 to aged, blind, disabled with incomes up to 100% FPL	185%	14%	23%	74%	185%	133%	100%
Arkansas	AR does not have eligibility extension to aged, blind, disabled. Medically Needy program limited to 22% FPL	200%	16%	20%	74%	200%	200%	200%
Colorado	CO does not cover aged, blind, disabled. Covers up to 79% FPL for State Supplementary Payments (SSP)	185%	32%	39%	74%	133%	133%	100%
Florida	90% FPL for aged, blind, disabled	185%	23%	62%	74%	200%	133%	100%
Maine	Single adults eligible up to 100% FPL	200%	150%	150%	100%	200%	150%	150%
Minnesota	95% for aged, blind disabled, 85% for SSP	275%	275%	275%	70%	280%	275%	275%

Source: Kaiser Family Foundation, State Health Facts, available at http://www.statehealthfacts.org, accessed April 1, 2005. (Their source for the insurance data was the March 2003 and 2004 Current Population Surveys, conducted by the U.S. Census Bureau and is based on self-reported data.)

Table III: Medicaid Financing for Selected States

State	Financing Mechanisms	Matching Rate (2006)	Average Spending per Enrollee
Texas	State portion of funding comes mostly from general revenue (small part from tobacco funds, hospitals, FQHCs, and fees from ICF/MRs)	60.66%	$3,284 in 2003
Arkansas	Proceeds of a soft drink tax since 1992 go directly to AR Medicaid Trust Fund. New income, cigarette and other tobacco taxes fund expenditures	73.77%	$2,966 in 2000
Colorado	State portion comes from general revenue, sliding scale premiums and copayments, 2% provider tax, 1% premium tax on HMOs and other networks	50.00%	$4,624 in 2000
Florida	State portion from general revenues, provider assessments, cigarette taxes, tobacco, non-general, fraud funds, and county funds	50.89%	$3,131 in 2000
Maine	Medicaid expenditures accounted for 20% of general funds	63.00%	$6,249 in 2000
Minnesota	State portion from sliding scale premiums and copayments and the Health Care Access Fund (funded by a 2% provider tax, 1% premium tax on HMOs and other networks, and other funds including general revenue)	50.00%	$5,418 in 2000

Abbreviations: FQHC– federally qualified health center; HMO– health maintenance organization

Source: Kaiser Family Foundation, State Health Facts, available at http://www.statehealthfacts.org, accessed April 1, 2005. (Their source for the insurance data was the March 2003 and 2004 Current Population Surveys, conducted by the U.S. Census Bureau and based on self-reported data.)

Table IV: SCHIP Characteristics of Selected States

States	Eligibility	Federal Share	State Share	Enrollment
Texas	Younger than 19, legal resident, not Medicaid eligible, no private or state employee coverage, family income <200% FPL	72.15% (2004)	27.85%	328,350 (2005)
Arkansas	Younger than 19, legal resident, not Medicaid eligible, no private or state employee coverage, family income <200% FPL	82% (2005)	18%	1,912 (2002)
Colorado	Younger than 19, citizen or legal resident, not Medicaid eligible, no private or state employee coverage, family income <185% FPL	65% (2005)	35%	49,978 (2003)
Florida	Younger than 19, citizen or legal resident, not Medicaid eligible, no private or state employee coverage, family income <200% FPL	71% (2005)	29%	319,477 (2003)
Maine	Younger than 19, citizen or legal resident, not Medicaid eligible, no private or state employee coverage, family income <200% FPL	75% (2005)	24%	13,085 (2003)
Minnesota	Younger than 19, citizen or legal resident, not Medicaid eligible, no private or state employee coverage, family income <200% FPL	65% (2005)	35%	2,731 (2003)

Source: Kaiser Family Foundation, State Health Facts, available at http://www.statehealthfacts.org, accessed April 1, 2005. (Their source for the insurance data was the March 2003 and 2004 Current Population Surveys, conducted by the U.S. Census Bureau and based on self-reported data.)

Texas

Private Insurance Regulation

Texas has an 11.3 percent HMO penetration rate, meaning that 11.3 percent of the Texas population is enrolled in an HMO. Regarding small-group market reforms (applies to groups of 2-50), Texas does not apply community rating, limits pre-existing condition exclusions (to 12 months exclusion and 6 months look-back time), and mandates guaranteed issue and guaranteed renewability (community rating, guaranteed issue and renewability are discussed at length in Chapter 10 "State Regulation of Health Insurance"). Regarding individual insurance market reforms, Texas does not apply community rating, does not limit pre-existing condition exclusions, does not mandate guaranteed issue, and does mandate guaranteed renewability. For people who have been denied coverage or could not afford the coverage they were offered, Texas has a high-risk pool funded by premiums and assessments on insurers. The number of people who can afford the high risk pool, however, is limited since the premiums are set at 200 percent of commercial rates for an individual's gender, age, and county of residence. The state mandates that patients have access to an external review board for filing complaints against their health plans, and mandates mental health parity of benefits (for "biologically-based mental illness"). Texas has a state COBRA expansion program of six months for small firms that are not covered by the federal COBRA law (KFF, 2005a).

Incentives for Small Groups

A statewide purchasing pool briefly existed. The law allows privately sponsored pools to form. As of September 2004 there was currently only one active fully insured alliance in Texas, with about 2,700 participants. Insurers expressed little interest in participating and did not think that purchasing pools would lower rates as much as expected. In 2003 the legislature authorized a new kind of purchasing pool called a health group cooperative, which can be made up of both small and large employers, and for which insurers can be exempted from having to provide all the state-mandated benefits (TDI, 2005a). As of March 2005, there was one health group cooperative registered with the Texas Department of Insurance, based in Dallas (TDI, 2005b).

Another option for small businesses is reinsurance. The Texas Health Reinsurance System was established in the Texas Insurance Code (Chapter 26, subchapter F) for small employer insurance carriers to reinsure risks covered under small employer health plans by spreading losses among members. Due to declining carrier participation in the system, it is being phased out.

Medicaid and SCHIP Initiatives

In Texas, 41.5 percent of Medicaid beneficiaries are enrolled in managed care, as compared to 60.2 percent for the U.S. as a whole (KFF, 2005a). Texas does not have an 1115 waiver and has not used Section 1931 to expand Medicaid coverage. The state has five 1915(b) Freedom of Choice Waivers and seven 1915(c) Home and Community-Based Services Waivers (THHSC, 2004). A bill for an 1115 women's health waiver was passed in the 2005 Texas Legislature. Texas is one of 10 states with a Health Insurance Premium Payment (HIPP) program. HIPP is a Medicaid program that pays for private health insurance premiums (like employer-sponsored insurance), coinsurance, and deductibles for Medicaid-eligible people and their families, when it is shown to be cost-effective. Texas offers 18 months extended eligibility for Transitional Medicaid Assistance (TMA), past the required 12 months (SCI, 2005e).

Florida

Private Insurance Regulation

Florida has a 25.2 percent HMO penetration rate. Regarding small-group market reforms (applies to groups of 1-50), Florida applies community rating, limits pre-existing condition exclusions (to 12 months exclusion and 6 months look-back time), and mandates guaranteed issue (through a high-risk pool) and guaranteed renewability. Regarding individual insurance market reforms, Florida does not apply community rating, limits pre-existing condition exclusions, and mandates guaranteed issue (through a high-risk pool) and guaranteed renewability. Florida has a state-sponsored high-risk pool with 638 enrollees as of December 2002. Florida has a state COBRA expansion program to 18 months for small firms (KFF, 2005b).

Incentives for Small Groups

The Governor's Task Force on Access to Affordable Health Insurance, created in 2003, recommended that Florida establish purchasing pools for small groups (2-25), and the Small Employers Access Program was implemented by the Florida legislature in 2004. Florida's Health Care and Insurance Reform Act of 1993 created 11 Community Health Purchasing Alliances (CHPAs) and implemented other significant insurance reforms on the small group market (FAHCA, 2003). Other reforms were adopted at the same time, including guaranteed availability to small employers and

modified community rating, requiring carriers to pool their small groups for rating purposes. These made the CHPAs not as important. They had a costly infrastructure and carriers began to drop out by 1997. They were repealed in 2003 and replaced with Health Care Alliances, which were also not embraced by insurers (HMA, 2004).

Medicaid and SCHIP Initiatives

In Florida, 64.3 percent of Medicaid beneficiaries are enrolled in managed care (KFF, 2005b). Florida has a family planning waiver that extends family planning services for up to two years for women who were pregnant and on Medicaid and who would have lost these services 60 days postpartum (KFF, 2005c). Florida has used Section 1931 to expand Medicaid coverage by increasing income disregards.

Not counting waivers that are pending or have expired, Florida currently has two 1915(b) Freedom of Choice Waivers (for children's inpatient psychiatric services and for non-emergency transportation). Florida has three current 1915(c) Home and Community-Based Services Waivers, for disability services, brain and spinal injuries and cystic fibrosis. The state has three 1115 waivers: the family planning waiver, a waiver for a pharmacy program for Medicare recipients, and a cash and counseling program (CMS, 2005a).

Other Health Insurance Reforms/Initiatives

Florida Governor Jeb Bush recently proposed, and the Centers for Medicare and Medicaid Services (CMS) approved, a fundamental restructuring of Florida's Medicaid program to control growing costs. He and his staff outlined a program where the state would pay the premiums for Medicaid beneficiaries to enroll in private health plans offered by insurance companies and HMOs, including an employer's plan if a beneficiary has access to employer-sponsored insurance. Gov. Bush said the state can predict and control costs better by calculating a premium for each Medicaid patient and allowing for an appropriate rate of growth.

In May 2005, the legislature passed Senate Bill 838, which allows pilot projects in five Florida counties to test Governor Bush's managed-care-only Medicaid model, after a federal waiver is obtained. The Florida Agency for Health Care Administration can still request a waiver to implement the governor's full program, but the bill requires the legislature approve the implementation in the state of any waiver that CMS approves for the pilot project (Hirth, 2005).

Arkansas

Private Insurance Regulation

Arkansas has a 7.0 percent HMO penetration rate. Regarding small-group market reforms (applies to groups of 2-50), Arkansas does not apply community rating, limits pre-existing condition exclusions (to 12 months exclusion and 6 months look-back time), and mandates guaranteed issue and guaranteed renewability. Regarding individual insurance market reforms, Arkansas does not apply community rating, does not limit pre-existing condition exclusions, and mandates guaranteed issue and guaranteed renewability. Arkansas has a high risk pool funded by premiums and assessments on insurers. Arkansas has a state COBRA expansion program, up to 120 days, for small firms (KFF, 2005d).

Incentives for Small Groups

In 2001, the Arkansas General Assembly passed several health reforms targeting access for individuals. The reforms included scaled-down insurance policies (exemption from state-mandated coverage

benefits), small-employer purchasing groups, and a demonstration project allowing communities to self-insure to provide coverage (SCI, 2003).

Medicaid and SCHIP Initiatives

In Arkansas, 69.4 percent of Medicaid beneficiaries are enrolled in managed care, as compared to 60.2 for the U.S. as a whole. Arkansas has a family planning waiver that extends family planning services to women up to 200 percent FPL (KFF, 2005d). Arkansas has used Section 1931 to expand Medicaid coverage by increasing income disregards; the state may disregard a family's first $120 in monthly earnings and one-third of the remaining monthly earnings before calculating if families' incomes are below the eligibility level to qualify for Medicaid (SCI, 2005d). Arkansas has various 1915 and 1115 waivers; details are available in Appendix C.

Other Health Insurance Reforms/Initiatives

Despite its history as a state with a high percentage of low-income individuals, low levels of employer-sponsored insurance, low Medicaid coverage for adults, and relatively poor health status, Arkansas has more recently been noted for its pursuit of coverage expansion. Arkansas' Medicaid expansion, ARkids B, which expanded eligibility to currently uninsured children through age 18 with family income at or below 200 percent FPL, has been considered a considerably progressive initiative. A component in the success of Arkansas' expansion efforts appears to be the Arkansas Center for Health Improvement, a joint project of the Arkansas Department of Health and the University of Arkansas for Medical Services created to provide support for state and local policy development and implementation (SCI, 2003).

Colorado

Private Insurance Regulation

Colorado has a 27.2 percent HMO penetration rate. Regarding small-group market reforms (applies to groups of 1-50), Colorado does apply community rating, limits pre-existing condition exclusions (to 6 months exclusion and 6 months look-back time), and mandates guaranteed issue and guaranteed renewability. Regarding individual insurance market reforms, Colorado does not apply community rating, does not limit pre-existing condition exclusions, and mandates guaranteed issue and guaranteed renewability. Colorado has a high risk pool called CoverColorado funded by the unclaimed property trust fund, premiums, the CoverColorado cash fund, and assessments on insurers. The state mandates that patients have access to an external review board for filing complaints against their health plans, and mandates mental health parity of benefits. Colorado has a state COBRA expansion program to 18 months for small firms (KFF, 2005e).

Incentives for Small Groups

Colorado's small group reforms began in 1995. Currently, all small groups with 2 to 50 employees can purchase one of two plans (Basic and Standard) that have to be offered by all small group carriers, regardless of employee health status. Self-employed persons, referred to as a "Business Group of One" (BG1), also fall into the definition of small group. To qualify as a BG1, an individual must provide detailed documentation of sole proprietorship status (CHI, 2005). Guarantee issue is required of all small group plans offered in the state, not just the Basic and Standard plans.

SCHIP and Medicaid Initiatives

In 2003, 95.3 percent of Colorado's Medicaid beneficiaries were enrolled in managed care, as compared to 60.2 for the U.S. as a whole (KFF, 2005e). This rate has dropped significantly to date after the state had problems negotiating rates with the managed care organizations (MCOs). Several MCOs filed lawsuits against the state citing inappropriate rate-setting, leading to state officials' disenchantment with MCOs and a dramatic move towards fee-for-service. Information on other waivers in the state is available in Appendix C.

Other Health Insurance Reforms/Initiatives in the State

In 2003, the state began considering applying for a HIFA waiver to streamline Medicaid, CHP+, and the Colorado Indigent Care Program (CICP), with the goal of improving access and coverage for Colorado's low-income children and families. The concept of streamlining consists of merging benefit packages, delivery systems, risk arrangements for vendors and providers, and administrative management of these programs while maintaining budget neutrality and without reducing eligibility or benefits. The state obtained a HRSA grant as well as funding from several state foundations to conduct studies and analyses.

Maine

Private Insurance Regulation

There is no separate high risk pool. There is a modified community rating system; insurance companies are permitted to vary premiums for coverage based on certain characteristics (e.g., age, location and type of employment), but they cannot vary premiums based on the health status or claims history of policy (MOG, 2004). There is a state rate review of individual and small group plans. Limited premium increases are allowed among Maine's small group market. At least 78 cents of every premium dollar increase must be spent on medical claims (MOG, 2004). Insurers are required to report administrative costs and underwriting gain. Insurers are asked to voluntarily limit operating margins to 3.5 percent. Insurance companies will pay up to 4 percent of annual gross revenues.

Incentives for Small Groups

Small-group employers will be able to offer insurance at a reasonable price.

SCHIP and Medicaid Initiatives

In June 2003, Maine passed the Dirigo Health Reform Act "to make quality, affordable health care available to every Maine citizen within five years and to initiate new processes for containing costs and improving health care quality" (Rosenthal & Pernice, 2004). The program aims to ensure access to coverage to as many as 180,000 state residents by 2009, specifically targeting small-business employees, the self-employed and individuals (SCI, 2005c). The cornerstone of the act is the Dirigo Health Plan (DHP), a statewide voluntary health insurance program aimed at offering comprehensive health care through MaineCare (the state's Medicaid program) and private insurance carriers. The program largely depends on the success of several cost savings measures being implemented by the state. The success of the program is also dependent on the willingness of small businesses to participate in the plan. Details of the plan are available in the white paper in Appendix C.

Minnesota

Private Insurance Regulation

Minnesota has a 26.7 percent HMO penetration rate. Regarding small-group market reforms (applies

to groups of 2-50), Minnesota does not apply community rating, limits pre-existing condition exclusions (to 12 months exclusion and 6 months look-back time), and mandates guaranteed issue and guaranteed renewability. Regarding individual insurance market reforms, Minnesota does not apply community rating, limits pre-existing condition exclusions, and mandates guaranteed issue and guaranteed renewability. Minnesota has a high-risk pool funded by premiums, assessments on insurers, and state appropriations (KFF, 2005e). It currently has about 30,000 enrollees (MCHA, 2005). The state mandates that patients have access to an external review board for filing complaints against their health plans, and mandates mental health parity of benefits. Minnesota has a state COBRA expansion program to 18 months for small firms (KFF, 2005e).

Incentives for Small Groups

In 2001 the Minnesota legislature passed an initiative to form a reinsurance fund for businesses with 10 or fewer employees that would cover 90 percent of claims from $30,000 to $100,000 (Sacks et al., 2002). As of October 2004 it was considered inactive.

Medicaid and SCHIP Initiatives

In Minnesota, 63.9 percent of Medicaid beneficiaries are enrolled in managed care, as compared to 60.2 for the U.S. as a whole. Minnesota has a family planning waiver that extends family planning services to men and women up to 200 percent FPL (KFF, 2005e). Minnesota has used Section 1931 to expand Medicaid coverage by increasing income disregards; the state may disregard a family's first $120 in monthly earnings and one-third of the remaining monthly earnings before calculating if families' incomes are below the eligibility level to qualify for Medicaid (SCI, 2005d). Minnesota has received one 1915(b) Freedom of Choice Waiver (for chemical dependency treatment) and five 1915(c) Home and Community-Based Services Waivers. The state has received three 1115 waivers: the family planning waiver, a waiver for managed care (called Minnesota Prepaid Medical Assistance Project Plus), and a waiver for MinnesotaCare, a managed care program (CMS, 2005b).

Other Health Insurance Reforms/Initiatives

Minnesota is a national leader in efforts to cover low-income uninsured people, which is why it has one of the lowest uninsured rates in the U.S. Besides MinnesotaCare, the state has General Assistance Medical Care (GAMC), a free program for very low-income adults between the ages of 21 and 64 with no children under age 19 who are not eligible for any other state or federal programs and meet other criteria. The program is administered by counties.

Models for Texas

This chapter examined some of the issues in health insurance coverage in Texas, and options that have been adopted in other states that could be applied in Texas. Many models and strategies used to increase the number of people with health insurance in other states are unlikely to work in Texas due to the political climate, economy, types of industries and large population in Texas. Since Texas has the highest percentage of uninsured residents in the nation, it will take more than one strategy to solve the problem.

There are a variety of steps that Texas could take to better address the issue. Texas could restore the Medicaid Medically Needy spend-down program for non-pregnant people so anyone with a major medical condition facing large medical bills could get emergency coverage if needed. This

measure would lessen hardship and bankruptcy from medical bills. Another option for the state is to let sole proprietors buy into group plans. Texas could increase funding for the high risk pool to subsidize premiums, since they are unaffordable for many of the uninsured. SCHIP funds could be used to implement an employer buy-in and a full-cost buy-in for SCHIP insurance. Lastly, the state should work to obtain more federal dollars. One method would be to apply for a 1931 Waiver to cover parents of low-income families with children who are not otherwise covered by Medicaid. This could significantly reduce the number of uninsured.

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[Chapter Seven]

Local Initiatives for Expanded Care and Coverage

[Local Initiatives for Expanded Care and Coverage]

Local health care safety nets help meet the health care needs of the large number of uninsured people that Medicaid, Medicare and other federal and state safety-net programs do not reach. These populations primarily include lower-income working families, adults with and without children, and undocumented immigrants. They also include large numbers of low-income children and parents, pregnant women, and disabled persons who are targeted by federal and state programs, but, for various reasons, are not covered. Local governments, private providers, and other partners have taken on the responsibility of creating local health safety nets by directly providing services or indirectly purchasing services or coverage in the private sector.

The viability of local health care safety nets is an important public policy issue in Texas, both for public health reasons, because of the consequences of untreated diseases for individuals and communities, and for fiscal reasons, since private health care providers are asked to absorb the unpaid costs of the uninsured. Public responsibility to care for the low-income uninsured is delegated to Texas counties. Minimal requirements for eligibility, service coverage and public financing were established by the Indigent Health Care and Treatment Act (IHCTA) passed in 1985 and amended in 1999 (TSHHC, 2004). Texas law mandates that counties provide care to individuals with incomes below the 21 percent federal poverty line (FPL). In addition, counties must spend 8 percent of their general revenue tax levy (GTRL) on indigent care to qualify for state assistance. To meet their obligation, counties can choose to create a hospital district, operate a public hospital, or form a County Indigent Health Care Program (CIHCP).

The legal requirements for safety-net care are not well-monitored nor enforced, and are set well below the need (TSHHC, 2004). Many counties do more than their legal requirement and rely heavily on partnerships with hospitals to fulfill mandatory benefit obligations and more adequately address the need. Other counties provide the minimum requirements, leading to uneven access for the uninsured and unequal tax burdens on local taxpayers. Local safety-net systems differ, to the extent to which they rely on services provided by either public entities or public-funded private entities to meet their obligations to the uninsured. They also differ in the availability of reliable funding sources that support safety-net services and the strength of these sources' commitment to provide a high standard of care.

With uninsured numbers rising and no significant expansions in federal and state coverage programs in place, demand for local health care safety nets is growing, increasing the burden on local governments and communities. To cope with the increasing burden, local governments and communities are pursuing a variety of resourceful and innovative strategies. Many communities are enrolling uninsured individuals and families in organized health plans that offer coordinated services which promote preventive care and reduce inappropriate use of emergency and inpatient services. Other communities are concentrating more on extending coverage to gap populations by

working with various partners to expand product availability and/or directly provide low-cost insurance products for the uninsured.

The purpose of this chapter is to review local initiatives to determine approaches being used to effectively expand existing safety nets and/or reduce the numbers of uninsured. The goal is to identify successful models in other communities that might be replicated. This chapter summarizes the contents of the white paper "Local Initiatives to Expand Care and Coverage of the Uninsured" by Begley et. al. The full version of the white paper can be found in Appendix D of this report.

Models for Expanding Care

One major strategy to expand safety-net care focuses on developing better-organized and coordinated service systems. This strategy has important features designed to:

- Provide enrollees with a medical home
- Offer some form of case management that enhances early detection of problems and promotes appropriate treatment
- Produce patient information that can be shared among public and private providers within the system
- Offer providers some incentives to serve low-income patients
- Promote the dignity of enrollees

The major features of selected models illustrating this strategy are summarized in Table I and II (White, 1999; Norton and Lipson, 1998; Nat. Assoc. of Counties, 2003 Coughlin et al., 2001; Wilson et al., 2004; Galbow et al., 2003; Andrulis and Gusmano, 2000; RWJF, 2001; Bovbjerg et al.; West, 1999; RWJF, 2004; Simmons and Gionfriddo, 2002; Simmons and Gionfriddo, 2004a; Simmons and Gionfriddo, 2004b; Morningside, 2002). More detailed information on each model can be found in Appendix D.

Table I. Local Care Initiatives, Expanding Care (Part I)

Location	*El Paso, TX*	*San Antonio, TX*	*Denver, CO*	*Detroit, MI*
Local Care Initiative	*Health Care Options*	*CareLink*	*Denver Health*	*PlusCare*
Start Date	*1999*	*1997*	*1994*	*1992*
Overview	*Health Care Purchasing with Managed Care*	*Health Care Purchasing with Managed Care*	*Consolidated Safety-net Plan with Managed Care Features and Vertical Integration*	*Managed Care Plan*
Delivery System				
*Services Provided**	*A,C*	*A – E*	*A – F*	*A – F*
Community Partners	*CHCs, FQHC, Hosp Dist, Other*	*Med School, Comm Medical Assoc, FQHCs*	*All Public Safety-net Providers*	*FQHCs and other Safety-net Providers*
Patient Cost Share (y/n)	*Yes*	*Yes*	*Yes*	*Yes*
Provider Payment	*FFS*	*FFS*	*Varies by Program*	*Capitation PMPM*
Eligibility				
Income Threshold	*100% FPL*	*200% FPL*	*Varies by program*	*$250/month/person*
Other	*Residents not eligible for other programs*	*Residents not eligible for other programs*		*$90 work expense deducted from income*
Total Enrolled	*7,000 (2004)*	*53,000 (2004)*	*155,000 (2002)*	*25,000 (2004)*

**Services Provided: A. Primary and Preventative Care, B. Inpatient Care, C. Specialty Care, D. Pharmacy Access, E. Behavioral Health Care, F. Dental*

Abbreviations: CHC–community health centers; FFS–fee-for-service; FPL–federal poverty line; FQHC–federally qualified health centers; PMPM–per member per month

Table II. Local Care Initiatives, Expanding Care (Part II)

Location	*Indianapolis, IN*	*Tampa, FL*	*Milwaukee, WI*	*Austin, TX*	*Buncombe Cty, NC*
Local Care Initiative	*Health Advantage*	*Hillsborough County Health Care Plan*	*General Assistance Medical Program*	*ICare System*	*Project Access*
Start Date	*1997*	*1992*	*1998*	*1997*	*1999*
Overview	*Health Care Purchasing with Managed Care*	*Health Care Purchasing with Managed Care*	*Health Care Purchasing with Managed Care*	*Integrated Eligibility And Patient Records with Pub/Priv Provided Service System*	*Providers volunteer health care services*
Delivery System					
*Services Provided**	*A — F*	*A — E*	*A - D*	*NA*	*A - E*
Community Partners	*Med School, FQHCs, Other Safety-net*	*Med School, FQHCs, Other Safety-net*	*Med School, FQHCs, Other Safety-net*	*All Safety-net Providers*	*CHCs, FQHC,Hosp Dist, Private Physicians*
Patient Cost Share (y/n)	*Yes if Income > 150% FPL*	*Yes*	*Yes*	—	*No*
Provider Payment	*Capitation-PMPM, FFS- Other*	*FFS*	*FFS- Physicians 80% Charges- Hospitals*	—	—
Eligibility					
Income Threshold	*200% FPL*	*100% FPL*	*115%-125% FPL based on family size*	*250% FPL depending on program*	*200% FPL*
Other	*Not eligible for other programs*	*Not eligible for other programs*	*Medical need required*	—	*Residents not eligible for other programs*
Total Enrolled	*47,000 (2004)*	*29,000 (2004)*	*25,000 (2004)*	*83,000 (2002)*	*26,000 (2005)*

**Services Provided: A. Primary and Preventative Care, B. Inpatient Care, C. Specialty Care, D. Pharmacy Access, E. Behavioral Health Care, F. Dental*
Abbreviations: CHC-community health centers; FFS—fee-for-service; FPL-federal poverty line; FQHC-federally qualified health centers; PMPM-per member per month

Innovative Strategies for Expanding Care

Several design features currently in use to expand systems of local safety-net care include:

- New community-wide organizations that allow for planning and coordination
- Standardized eligibility processes that identify and limit patient populations and assign them to a medical home
- Integrated data systems that make patient eligibility and medical information readily available to providers
- Provider networks that offer access to primary and specialty services
- Case management services that encourage care coordination
- Provider payment methods that create incentives to serve low-income uninsured patients

Existing governance structures often face difficulties when they attempt to operate a coordinated health care safety-net system involving multiple agencies, public and private providers, and different sources of financing. One of the ways safety-net systems have extended care is by creating organizations that work on both establishing relationships among safety-net providers and common goals, such as community-wide planning and service coordination. The form of these organizational relationships may include:

- Consolidation - Health care agencies merge for policy, administration, and delivery of services. The main intent is to centralize authority and provide a more efficient and accountable system.
- Collaboration - Health care agencies develop arrangements to take joint responsibility for policy, administration, and delivery of services.
- Coordination - Health care agencies develop arrangements for joint responsibility of the delivery of services.

Safety-net programs extend care by developing integrated eligibility systems that make it easier for clients to qualify for existing public coverage. These systems include a defined screening, eligibility and enrollment process. This process should limit eligibility, define the eligibility period and service restrictions, and encourage stable participation. Outside funding is maximized by ensuring that persons meeting eligibility criteria for local, state and federal programs become enrolled in these programs.

Innovative safety nets also use primary care assignment to expand capacity, improve continuity of care and reduce costs. Patients are assigned to a specific medical home where they have expanded access to primary care, but must be approved for referrals to specialty care. Provider reimbursement methods are developed that include risk arrangements and provide performance incentives.

Specialty care is an important component of an effective local health care initiative. Meeting the costs to maintain an adequate supply of specialty care providers can be challenging. Local health care initiatives have involved specialty care providers in the design and development of specialty provider networks and in establishing adequate reimbursement rates and performance-based payment methods for specialty care.

Another feature common to safety-net systems is the presence of structured referral procedures to coordinate care between ambulatory and hospital settings. This may involve structured protocols in clinics, hospitals and emergency rooms for patient referrals to the most appropriate and least expensive settings for care. Additional features

may include after-hours hot lines and navigators to assist patients in accessing services.

Safety-net initiatives also focus on developing integrated patient record systems (IPRS) that link ambulatory, hospital and specialty care sites. An IPRS tracks eligibility, health history and movement of patients as they obtain services. These systems are used for enrolling patients in third-party programs, improving access to and quality of services, and saving costs through reduced duplication.

Innovative safety-net models have invested resources in developing quality assurance programs with patient care guidelines and case management programs. Such programs require an IPRS that allows monitoring patterns of care and outcomes. Community resources for quality assurance activities, measurement strategies, and performance targets should be determined in a new program's development phase. Periodic evaluations that permit public accountability are important to the success of a program.

Safety-net programs rely completely on local funds or on a combination of local, state and federal funds. They rarely have sufficient funds to adequately serve the target population. Those with a substantial portion of funds from a regular payer source, such as Medicaid or commercial insurance, typically have the most success. A diversified funding stream enables local safety-net programs to stabilize their budgets and protect themselves from unanticipated changes in any particular funding source.

Finally, several safety-net models are taking a broad view of health-related services necessary to meet the array of medical, social, behavioral and financial needs of the uninsured. Detailed linkages between social services, transportation and local public health services allow coordination between treatment and prevention programs. The linkages range from consolidation to sharing facilities and referral arrangements.

Models for Expanding Coverage

A second common safety-net strategy is to develop low-cost insurance products that extend public and private coverage to larger segments of the population. This can be accomplished by developing and offering private plans to small businesses and individuals, mandating small business coverage, and/or developing cooperatives that allow small employers to join larger employers. Models of this strategy are summarized in Tables III and IV. Additional details of the programs can be found in Appendix D of this report. (Silow-Carroll et al., 2004; NIHCM, 2003; Silow-Carroll et al., 2000; Silow-Carroll et al., 2001; Fronstin and Lee, 2005; Meyer and Rybowski, 2001; Meyer et al., 2001; Rosenburg, 2003; Kronenberg, 2004; Kronenberg, 2003; Katz, 2001)

Innovative Coverage Initiatives

Issues that must be addressed by local initiatives designed to extend public and private coverage include:

- Benefit Design
- Cost
- Target Population
- Financing
- Marketing
- Provider Choice
- Program Duration
- Enrollment and Operations
- Transition

Benefit Design

The level of benefits and services offered by health plans vary significantly, reflecting different approaches to creating affordable products. Some health plans offer comprehensive services with limited cost-sharing, patterned after products available to other commercial members. In an effort to reduce the cost of coverage, a number of health plans provide more limited-benefit packages and greater cost-sharing. Several health plans conducted extensive market research to develop an optimal benefit package. Regardless of which strategy was followed, health plans that were stable and reasonably adequate in meeting the patient population's most basic needs seemed to attract more enrollees. The reasons a particular product attracted its intended audience can be attributed to a combination of the following: a benefits package with services previously unavailable to the intended population, a competitive, low-priced product, a significant investment in marketing, and a well-defined target population.

Table III. Local Coverage Initiatives, Expanding Coverage (Part I)

Location	*Kansas City, MO*	*Moore County, NC*	*Wayne County, MI*	*Muskegon, MI*
Local Coverage Initiative	*Chamber Choice*	*Firstplan*	*HealthChoice*	*Access Health*
Start Date	*1994*	*2002*	*1994*	*1999*
Overview	*Private, unsubsidized, small group coverage with choice of open or closed network*	*Private, partially subsidized, small group coverage with choice of open or closed network*	*Private, subsidized, small to medium sized group coverage with choice of open or closed network*	*Private, subsidized, small to medium-sized group coverage with closed network*
Organizational Form				
Administrator	*Blue Cross Blue Shield of Kansas City*	*FirstHealth of the Carolinas*	*Patient Care Management System*	*Access Health*
Delivery System				
*Basic Services Provided**	*A – D*	*A – E*	*A – D*	*A – D*
Provider(s)	*Private physicians*	*FirstHealth of the Carolinas, private physicians*	*Private physicians*	*Private physicians*
Patient Cost Share	*Yes*	*Yes*	*Yes*	*Yes*
Financial				
Funding Model	*Private insurance plan*	*Private insurance plan*	*Three way shared buy-in*	*Three way shared buy-in*
Eligibility/Enrollment				
Children	*Yes*	*Yes*	*Yes*	*Yes*
Adults	*Yes*	*Yes*	*Yes*	*Yes*
Income threshold	*250% FPL*	*---*	*---*	*---*
Other	*Businesses with up to 50 employees*	*Businesses with up to 50 employees*	*Businesses with at least 3 employees*	*Business with up to 50 employees*
Total enrolled	*80,000 (dependants not inc, 2004)*	*2,000 (2005)*	*19,019 (dependants not inc, 2000)*	*1,150 (2004)*
% previously uninsured	*40%*	*19%*	*100%*	*100%*

**Services Provided: A. Primary and Preventative Care, B. Inpatient Care, C. Specialty Care, D. Pharmacy Access, E. Behavioral Health Care, F. Dental*

Cost and Financing

Lack of affordable products is the reason many are uninsured, prompting innovative health plans to find methods of lowering product premiums. Several products are now available at 50 percent of commercial rates. Some have premiums of less than $100 (for individuals), with most offering some variation of the product at less than $50. These ranges reflect the results of market research, which has consistently shown that $50 to $100 per month is the maximum price low-wage workers are willing to pay for health coverage.

The health plans use numerous methods to reduce premiums, including negotiated discounts with providers, limited benefits packages, subsidized plans, enhanced cost-sharing, and lower profit and administrative fees for carriers. Despite lower premiums, some plans found their products did not attract the anticipated number of customers because the premium remained out of reach, the product's benefits were viewed as insufficient for its price, or the product seemed less desirable when compared to the company's other offerings.

Table IV. Local Coverage Initiatives, Expanding Coverage (Part II)

Location	*Alameda County, CA*	*Alameda County, CA*	*New York, NY*	*San Francisco, CA*
Local Coverage Initiative	*Alliance Group Care*	*Alliance Family Care*	*Health Pass*	*Healthcare Accountability Ordinance*
Start Date	*2000*	*2000 – 2004*	*1999*	*2001*
Overview	*Private, subsidized, workgroup specific coverage with closed network*	*Private, subsidized, family coverage with closed network*	*Private purchasing cooperative for small businesses*	*Public, health insurance mandate for government contractors*
Organizational Form				
Administrator	*Alameda Alliance for Health*	*Alameda Alliance for Health*	*New York Business Group on Health*	*San Francisco Department of Public Health*
Delivery System				
*Basic Services Provided**	*A - E*	*A - G*	*A – D*	*A – E*
Provider(s)	*Local safety-net*	*Local safety-net*	*Private physicians*	*Private Physicians*
Patient Cost Share	*Yes*	*Yes*	*Yes*	*No*
Financial				
Funding Model	*Heavily Subsidized*	*Heavily Subsidized*	*Cooperative*	*Government*
Eligibility/Enrollment				
Children	*No*	*Yes*	*Yes*	*Yes*
Adults	*Yes*	*Yes*	*Yes*	*Yes*
Income threshold	—	*300% FPL*	—	—
Other	*In-home supportive services workers*	—	*Businesses with up to 50 employees*	*City/County contractor*
Total enrolled	*4,400 (2005)*	*7,400 (2004)*	*9,111 (2004)*	—
% previously uninsured	*100%*	*100%*	*56%*	*100%*

**Services Provided: A. Primary and Preventative Care, B. Inpatient Care, C. Specialty Care, D. Pharmacy Access, E. Behavioral Health Care, F. Dental*

The presence or absence of plan subsidies does not appear to be a major factor in attracting the uninsured. Private health plans may find some advantages in subsidizing products, such as enhancing the provider-plan relationship through partial reimbursement for services that would otherwise be uncompensated. Also, some health plans recognize the uninsured as a potential future market. Subsidized initiatives offer exposure to the plan and may build loyalty when the individual or family is in a position to obtain commercial health insurance.

Target Population

Many initiatives restrict program eligibility due to a product's limited funding or to avoid duplication with other available coverage programs. Most of the individual products reviewed established income eligibility limits and were restricted to individuals not eligible for existing local, state, and federal programs. Some private sector products with more restrictive eligibility criteria than others experienced mixed results upon enrollment. Two health plans that did not reach desired membership levels attracted many applicants who were not eligible, despite having conducted preliminary assessments before initiating their programs. Regardless of the target population, most new health insurance products took time to attract members. Some successful initiatives did not achieve enrollment goals until one to two years after the product's launch.

Marketing

Marketing is critical to the success of coverage initiatives. The availability of a quality product at a low cost does not guarantee the target population will purchase it. Three initiatives that enrolled more than 10,000 people conducted extensive market research to determine which channels would most effectively reach their target population. For small group products, a multi-faceted approach to marketing is generally associated with higher enrollment. Successful small-group initiatives that attracted more than 10,000 members used direct mail, brokers, the Internet, toll-free telephone numbers, and television, print and radio advertisements. Health plan representatives indicated that, of these different strategies, brokers were most essential in securing new members. Programs with enrollment difficulties either did not use brokers or worked with a limited number to recruit customers. Brokers are not only a bridge between health plans and consumers, they educate employers about the value of health insurance and the different available purchase options.

Providers

Provider choice affects program marketability and price. Nearly all health care organizations that developed insurance products employed the same network used for all other products, concluding that product success is dependent, in part, on having a network identical to that of other competing coverage. While a broad network did not guarantee consumers would purchase a product, a restricted panel did have negative consequences on enrollment.

Program Duration

Several of the initiatives were either time-limited pilot programs or intended to serve as short-term insurance. Among the shorter-term programs, enrollment has been lower than anticipated, as some pilots with limited availability experienced difficulties due to service area, income or number of potential members. Longer-established programs are better able to meet membership targets. Short-term projects provide only temporary coverage for the uninsured, since the closing of a

program usually marks the end of health benefits. Also, some employers who have made the commitment to offer a short-term product may face a predicament once the program terminates because they must decide to maintain coverage without plan subsidies, find another affordable product, or discontinue health benefits.

Nonetheless, short-term coverage initiatives may be desirable under certain circumstances. Pilot programs allow plans to try new, unproven or otherwise risky coverage approaches. Plans are able to make changes on a small scale and refine their products over time, before investing significant resources in major program modifications. To overcome barriers inherent in pilot programs, one health plan created a product for both its current members and uninsured persons to replace its existing programs. By rolling over current members into new individual and small group products, the plan mitigated the risk that initial enrollment projections would not be met. However, a health plan has no guarantees that every member will prefer the new product over the old, or that all members will choose to renew. Moreover, replacement products still face obstacles similar to pilots and other new programs in attracting the uninsured.

Transitions

Recognizing that many people become uninsured as a result of transition-related issues, some health plans designed products only for those individuals who: lose status as a dependent on another's policy and are unable to secure one's own coverage; change jobs or become unemployed; or lose eligibility for public programs and are unable to secure private coverage. The products addressed these age, income, and public/private transition populations by: allowing over-aged dependents to remain on their parents' policies; guaranteeing rate stability for the near-elderly; providing subsidies to pay for a percentage of one's premiums for a fixed amount of time; and bridging the divide between the public and private sectors through cross-referrals. In general, products attempting to address transition issues have generated higher enrollment than those that have not.

Enrollment and Operations

Innovative health plans acknowledged operational and enrollment problems, such as multi-step application procedures, as major barriers to extending coverage. Failure in any step of this process can result in lack of coverage and loss of potential members. Several programs addressed enrollment issues by streamlining applications, allowing self-declaration of income, and providing multi-lingual application materials. These products attracted a greater percentage of the uninsured than others. Some people are unable to obtain care due to language or cultural barriers. Two health plans attempted to increase access by using multi-lingual case managers to help new members navigate the health care system. Members received case managers as long as the focus was on health, rather than social or career issues.

Summary

Texas faces significant challenges in providing access to health care for the state's uninsured. To help develop local initiatives that address these issues a number of local programs with expanded care and coverage for the uninsured have been reviewed. The state should consider creating a program that supports local efforts for producing more coordinated and collaborative health care systems. This program should include direct financial support and/or other financial-related incentives

for innovations, such as Medicaid payment for navigator services, technology grants for electronic record systems, and/or tax credits for private insurance plans that integrate coverage with Medicaid. State support is also needed as seed money to develop community-based health insurance plans and expand existing successful plans to broader populations and geographic areas.

Some of the nation's best safety-net systems featured in this report do not have programs to assist individuals in families with incomes above 200 percent FPL. As a result, local initiatives targeting services or coverage for this fastest- growing segment of the uninsured population should be emphasized. These programs would provide more affluent people an opportunity to make a significant contribution to their own health care costs. A relatively simple step the state could take toward improving the performance of safety-net systems would be to require standardized reporting from all county safety-net programs. Using data from these reports, state and local officials could more accurately understand the features of existing programs, monitor performance, assess unmet needs and identify the potential impact of innovative strategies.

The state's limited underwriting requirements for small businesses is a major cause for the gap in small-employer coverage when compared to the rest of the country. Until these regulations are changed to include community rating and development of cooperatives, the number of commercial products available to small groups and individuals will be inadequate, even with community-based efforts to expand their availability. Current law is skewed against small employers, who comprise the majority of Texas employers and those employers who do not offer health insurance.

While local initiatives are an important part of reducing the number of uninsured residents in Texas, they do not solve all of the complex problems associated with this population. Many rural and less-populated counties do not have the infrastructure or tax base to support initiatives described in this chapter. For these areas, different approaches toward reducing the numbers of uninsured and improving their health care access need to be considered. In addition, while local counties are in a position to help reduce the numbers of uninsured, these programs are very dependent on financing and strong public health, mental health and Medicaid/SCHIP infrastructures. If these erode, none of these community-based systems will be able to make a difference.

This review shows that innovative models of community-based care and coverage have the potential to significantly expand access to care. Since Texas requires counties, through broad statutory obligation, to provide medical care to low-income, uninsured persons in the state, a comprehensive approach toward expanding these models in Texas appears warranted.

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[Chapter Eight]

Trauma Care in Texas

Trauma is the leading cause of death for Texans under the age of 45 and is the third leading cause of death and disability for all Texans. Every day, there are an average of 32 trauma deaths in Texas with motor vehicle crashes, suicide and homicide topping the list of causes (Jones et al., 2004). Regionalized emergency and trauma care systems have been shown to increase survival of severely injured patients (Nathens et al., 2004), but these systems are not well-developed throughout the state and are facing external pressures.

Growth in regional trauma systems is not keeping up with the population. They are increasingly becoming overburdened by the public who often use emergency rooms for primary-care related visits. A rising number of seriously mentally ill patients are going to emergency rooms due to declining funding for community-based mental health services. Because trauma centers must treat both the insured and uninsured, and must ensure adequate availability of special equipment and trained personnel to meet the needs of severely injured patients, they are also becoming financially vulnerable.

To address the development and current state of emergency and trauma care systems in Texas, this chapter will provide an overview of the history and underlying problems of this component of the health care system. The chapter is an abbreviated version of the white paper "Emergency and Trauma Care in Texas" submitted to the task force by Begley (see Appendix G).

Legislation and Funding of Trauma Systems

Federal

Federal funding for emergency system planning and provider training was first granted during the 1970s through two pieces of legislation – the Emergency Medical Services System Act of 1973 and the Emergency Medical Services Amendments in 1976. Although $300 million was spent over eight years and 304 EMS regions were created, only a few areas were able to establish continual funding for EMS at the state or local government level (Mullins, 1999) (American Trauma Society, 2002). The Omnibus Budget Reconciliation Act of 1981 substantially reduced the allocation of emergency medical services (EMS) grants to the states and incorporated the funding in block grants to states for programs to support preventive measures and health services (Mullins, 1999).

Additional federal legislation that impacts trauma care includes the Emergency Medical Treatment and Active Labor Act (EMTALA) (Kamoi, 2004). Passed in 1986 as part of the Consolidated Omnibus Reconciliation Act of 1985 (Pub Law 99-272), this law, often referred to as the 'anti-dumping law', creates a requirement for medical screening and stabilization of patients with emergencies presenting to a hospital emergency center. Moreover, this law imposes regulations and restrictions on transfer of patients between hospitals. While provisions have been made for payment for screening examinations, this law still largely imposes an "unfunded mandate" on hospitals and trauma centers caring for injured patients (Fields, et al., 2004).

In May of 2005, the Centers for Medicare & Medicaid Services (CMS) issued final guidance for a nationwide $1 billion program mandated under the Medicare Prescription Drug, Improvement, and Modernization Act (MMA) to help hospitals and other providers with the cost of providing emergency care to undocumented aliens. The four-year program provides extra funding to those states, including Texas, with a higher burden of care for undocumented aliens. The funding, often referred to as Section 1011, designates a national contractor to administer reimbursement to hospitals, certain physicians and ambulance providers (CMS, 2003).

Texas

Initial state legislation to establish regionalized emergency and trauma care systems in Texas was passed in 1989. The Texas Legislature charged the Texas Department of Health (now the Texas Department of State Health Services, or TDSHS) to implement a statewide EMS and trauma care system including a designation system for trauma facilities and a trauma registry. However, no funding was provided to TDSHS to accomplish these directives (TDSHS, 2003). In 1992, the TDSHS adopted rules for implementing the Texas trauma system which called for the state to be divided into 22 trauma service areas (TSAs). Each TSA was required to develop a regional advisory council (RAC) with appropriate representation from local EMS agencies and trauma hospitals. RACs were required to develop and implement a regional trauma system plan (TDSHS, 2002).

Throughout the decade, emergency services and trauma system planning and development continued as the TDSHS rules were implemented. Yet, many of these activities took place with little funding. In 1997, the Texas Legislature redirected $4 million from 9-1-1 funds to the newly created EMS/Trauma System fund. Each legislative session thereafter has redirected approximately $4 million to this account each biennium from 9-1-1 fees. In 1999, $100 million of the state's tobacco funds was set aside in a permanent endowment with the interest on these funds directed toward trauma and EMS needs. The annual interest from these funds, approximately $3 million a year, is directed toward local project grants to EMS agencies and funding for the RACs. Also during the 1999 legislative session, the tertiary medical account was established to reimburse trauma hospitals for the cost of uncompensated trauma care incurred for out-of-county patients (TDSHS, 2003). A little over $16 million was allocated to this account in 2001 and 2002. No funds have been appropriated since 2002.

An important development in trauma and emergency services system planning was the establishment of the Governor's EMS and Trauma Advisory Council (GETAC) in 1999 by the TDSHS Sunset legislation. GETAC was established to provide input and recommendations to the Texas Board of Health and TDSHS staff. Later, GETAC's charge was expanded to assess the EMS needs in rural areas of the state and to create a strategic plan relating to development of EMS and trauma systems in the state and to refine educational and certification requirements of EMS providers (GETAC, 2002).

With a growing vocal constituency calling for funding support for the state's EMS agencies and trauma centers, the 78th Texas Legislature passed two funding vehicles in 2003. Senate Bill 1131 directed funds to EMS and trauma care providers through an additional $100 fee to be paid by those convicted of certain intoxication offenses. It was expected to raise between $3 million to $6 million

annually for uncompensated trauma care. Funding from this legislation in the most recent biennium was just over $2 million to support trauma hospitals, EMS agencies, the RACs and the TDSHS Office of EMS/Trauma Coordination. In addition, House Bill 3588 promised a great deal more in funding to EMS and trauma care providers through its Driver Responsibility Program. This program, which would penalize habitually bad drivers, was expected to generate $220 million annually for uncompensated trauma care costs, as well as the cost to provide EMS services throughout Texas.

Simultaneously with the development of the EMS and trauma system was the implementation and growth of the emergency communications system. While Odessa was the first city in Texas to implement the universal emergency telephone number of 9-1-1 in 1970 (Odessa American, 1970), by the end of the decade, only 20 such systems existed in Texas cities. The 1980s saw the creation of emergency communication districts in various counties in Texas. During the 70th Texas Legislature in 1987, a bill known as House Bill 9-1-1 was passed, charging regional planning councils to develop a statewide emergency communications system. By 1990, all regions within the state not covered by an existing emergency communications district had submitted plans for the development of the telecommunications system needed to support 9-1-1. The regions were then allowed to begin collecting fees charged on local citizens and business' telephone lines to fund implementation of the telecommunications plans (Galveston Co. Emerg. Comm. Dist., 2005).

From the perspective of emergency management, the importance of adequate funding for EMS agencies and trauma facilities cannot be overstated. Today, funding for local EMS services remains primarily an obligation of local governmental entities in Texas, despite federal and state efforts to provide support. Likewise, support for trauma services is generally dependent upon the voluntary decisions of local hospitals. Although the Texas Legislature has worked to ensure 9-1-1 capability in all 254 counties in Texas, it can neither guarantee that there will be an ambulance to pick someone up after a 9-1-1 emergency call, nor can it guarantee that there will be a hospital available to take care of the patient.

Trauma Centers

Currently, there are 252 designated trauma centers in Texas, 13 Level I, 10 Level II, 40 Level III, and 189 Level IV (TDSHS, 2006). The TDSHS designates facilities using standards set forth by the American College of Surgeons. The resources that must be maintained by these facilities are described below.

Level I trauma centers typically serve a large city or a high-density population area and are expected to manage large numbers of injured patients. These centers anticipate admittance of at least 1,200 trauma patients yearly. Of those, 20 percent will have an Injury Severity Score (ISS) of 15 or greater (out of 75) or there will be 35 patients per surgeon with an ISS of 15 or greater. Institutional dedication to trauma is essential. There must be departments or divisions of surgery, neurosurgery, orthopedic surgery, emergency medicine and anesthesia. Essentially every surgical subspecialty as well as obstetrics/gynecology, critical care medicine and radiology must be on call and promptly available 24 hours a day. Board certification is expected for general surgeons, emergency physicians, neurosurgeons and orthopedic surgeons. Level I trauma centers are expected to maintain

specific emergency department personnel as well as equipment pertinent to trauma in all age groups. Twenty-four hour a day immediate operative capability, a staffed recovery room, intensive care units for the critically injured, respiratory therapy services, radiological services (including angiography, sonography, computed tomography (CT) with an in-house technician, and MRI), clinical laboratory services, hemodialysis, burn care, and acute spinal cord management are all essential. Rehabilitation services must also be available. Performance improvement including chart audits, care reviews and a trauma registry are essential. Finally, Level I trauma centers are expected to be leaders in continuing education, trauma prevention programs and research.

Level II trauma centers provide care either in an area of high population density to supplement the activity of a Level I center or in a less densely populated area where a Level I center is not immediately available. In the second case, there should be transfer agreements prearranged with a distant Level I facility. Level II centers are expected to have similar institutional organization, hospital departments/divisions, and clinical capabilities as Level I facilities. However, cardiac surgery, microvascular/replant surgery and acute in-house hemodialysis are not required. A surgeon is expected to be on call 24 hours a day and at resuscitations and operative procedures. The operating room must be adequately staffed and available when needed in a timely fashion. Emergency department personnel and equipment, recovery room and intensive care unit availability mirror that of a Level I institution. Many of the radiological services expected for the Level I center are expected for the Level II center. However, it is acceptable to not have an in-house CT technician or an MRI unit. There are fewer requirements for continuing education/outreach programs, prevention programs and research.

Level III trauma centers must have the capability to manage the initial care of the majority of injured patients and have 24-hour general surgical coverage. They should have transfer agreements in place for patients that exceed resources. The only specialties considered essential are emergency medicine, anesthesia, orthopedics, plastic surgery and radiology. The 24-hour availability of an operating room and on-call personnel are desirable. In house radiological services are desirable, but not expected; CT availability is expected. A trauma registry and continued medical education availability for physician and nursing staff are expected. Prevention programs and research are desirable, but not required.

Level IV trauma centers should be able to provide the initial evaluation, assessment and resuscitation of injured patients. Patients with known or potentially serious injuries will require transfer to a larger facility with more resources. The facility should have 24-hour coverage by a physician, although surgical coverage may not be available. These facilities are typically located in rural areas. Continuing education and prevention programs are desirable as well.

Trauma Care Use and Outcomes

Trauma volume in Texas hospitals for 1999 and 2003 was estimated from Texas hospital admission data. There has been an overall increase of 16.1 percent during the five-year period (Table I). As a percentage of total discharges, trauma admissions increased from 3 to 4 percent. The characteristics of trauma cases has remained relatively stable. The

majority of cases are adults ages 18 to 64. The race/ethnicity distribution reflects that of the population. About one-third are commercially insured, 40 percent are covered by Medicare and Medicaid, and 15 percent are uninsured.

Table I. Trauma Cases, 1999 – 2003 in Texas

	1999	2003
Total discharges	74,275	86,203
Gender (%)		
Female	42.9	46.2
Male	57.1	53.8
Age (%)		
Children 0 – 17	15.6	15.3
Adults 18 – 64	58.3	55.9
Elderly 65 and older	26.1	28.7
Race (%)		
American Indian/Eskimo/Aleut	0.2	0.1
Black (non-Hispanic)	10.5	9.6
White (non-Hispanic)	58.4	60.0
Hispanic	24.7	26.0
Asian/Pacific Islander	0.8	0.7
Other	3.9	5.1
Payment Source (%)		
Commercial Insurance	36.5	32.9
Medicare	25.3	30.2
Medicaid	8.8	11.5
Other Government	0.3	0.3
Other Private	6.4	5.0
Uninsured/Self-pay	16.7	15.3
Other	5.6	4.6

The Injury Severity Score (ISS) is used to measure the severity of the patient's injury. Most cases fall in the 1-15 range of severity with 8 to 9 percent per year hospitalized for major trauma (ISS>15). The percentage of major trauma cases did not change over the period. Over 70 percent of all patients treated were discharged home or to self-care expecting a full recovery. Approximately one-fourth of the patients were transferred to another facility where their condition upon discharge is unknown. Only 2 to 3 percent died before discharge or were discharged to hospice care.

Current Issues and Challenges

Uncompensated Care

Trauma centers are financially vulnerable because, in their role of providing critical care services to a community, they treat a disproportionate share of uninsured and underinsured patients. There has not been an on-going effort to measure the amount of trauma care costs that are uncompensated in Texas' EMS and trauma care systems. However, uncompensated trauma hospital costs can be extrapolated from figures supplied by hospitals to the TDSHS to solicit HB 3588 funds. If these self-reported figures are used, it would appear that Texas hospitals spent about $208 million treating uninsured trauma patients in 2003 (TDSHS, 2005). This figure is based on uncompensated trauma care charges to which DSHS applied hospital specific cost-to-charge ratios to derive uncompensated trauma care costs for each designated facility. The figure is similar to an independent estimate by Bishop+Associates in a 2002 study conducted on behalf of Save Our ERs in Houston. Based upon their analysis, 32 percent of all trauma patients in Texas were uninsured, generating uncompensated costs at these facilities of more than $181 million. An effort is being made at the TDSHS

to include questions in the annual survey of hospitals related to the provision of care to uninsured emergency and trauma patients. This will likely be included in the 2005 Annual Survey which will be administered in mid-2006.

Hospitals must recoup their costs, or risk going out of business. The standard practice is to shift the cost of uncompensated care to those who can pay. A recent national study estimated that in 2005, premium costs for family health insurance coverage provided by private employers will include $922 in premiums due to the cost of care for the uninsured (Families USA, 2005). Health insurance premiums for Texas families is estimated to be $1,551 higher due to the unreimbursed cost of health care for the uninsured. The portion of these costs attributable to uncompensated costs of trauma care is unknown.

Emergency Room Overcrowding and Trauma Care

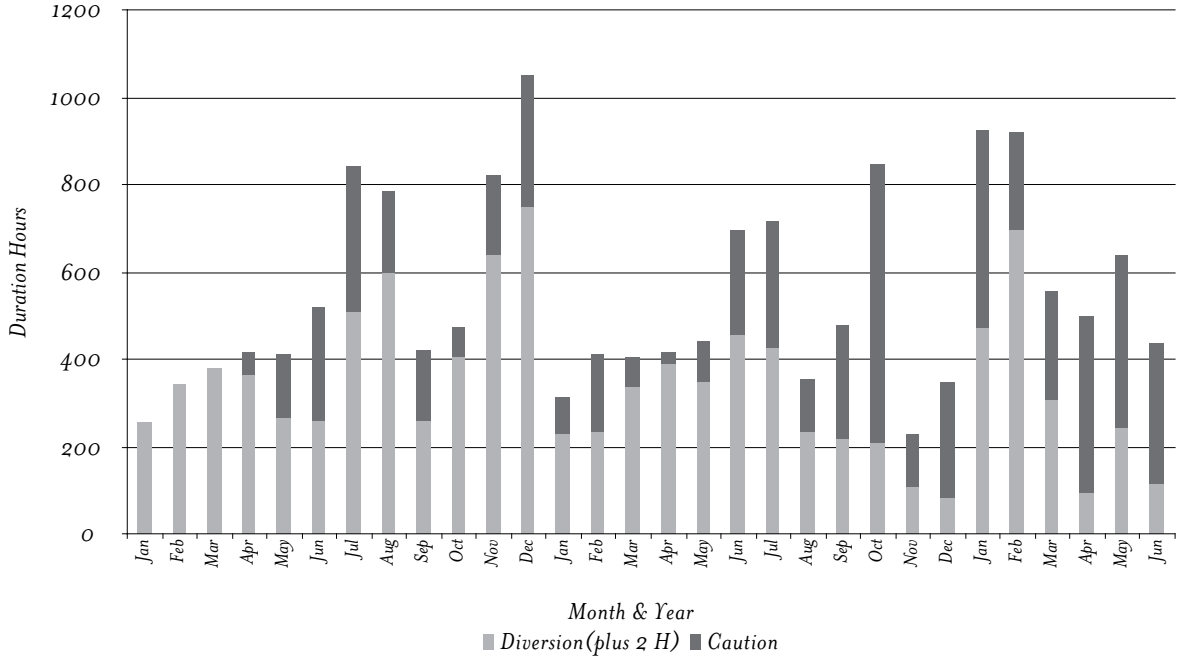
In addition to providing specialized trauma services, many trauma centers are also a critical part of their community's health care safety net. With the enactment of the Emergency Medical Treatment and Active Labor Act (EMTALA) in 1986, they became the only legally mandated "open door" for everyone in a community. Several studies have shown that the uninsured without a regular source of primary care are disproportionate users of hospital emergency rooms (ER) (Jones et al., 1999; O'Brien et al., 1997; Grumback, 1993). The reliance on hospital emergency rooms for basic care, particularly by low-income uninsured populations, contributes to the ER overcrowding problem. ER overcrowding is the term used to describe a nationwide problem of overloaded emergency departments that can lead to ER closures, diverted ambulances, and greater risks for all patients and providers.

ER data have been collected from four major trauma centers — Brackenridge in Austin, a Level II trauma center; Parkland in Dallas, a Level I center; and Ben Taub and Memorial Hermann in Houston, both Level I centers — to examine the frequency of primary care-related visits being made by the uninsured in Texas.[1] The data indicate that the primary care-related visits (non-emergent, primary care treatable, or preventable) (Billings, 2000) represented 52 percent of visits at Brackenridge, 42 percent at Parkland, 57 percent at Ben Taub, and 45 percent at Memorial Hermann. The magnitude of primary care-related visits at these hospitals is not unusual. What is extraordinary is that the patients making these visits are mostly uninsured or on Medicaid, reflecting the payment characteristics of the populations served by these hospitals. The percentage of patients making primary care-related visits at Brackenridge that were uninsured was 46 percent, 48 percent at Parkland, 44 percent at Ben Taub, and 23 percent at Memorial Hermann. The percentage with Medicaid coverage were 24 percent at Brackenridge, 18 percent at Parkland, 19 percent at Ben Taub, and 42 percent at Memorial Hermann.

As a means to alleviate pressure in their own facilities, hospitals across the country employ a practice whereby they notify local EMS agencies when they have reached capacity and request that incoming ambulances be directed, or diverted, to other hospitals. Generally, this leads to a domino-effect in the emergency health care system where capacity issues in one hospital quickly lead to over-

[1] These data were supplied by Sandy Coe Simmons, Indigent Care Collaborative of Travis, Hays, and Williamson Counties; Dan Culica, UTSPH Dallas; Charles Begley UTSPH Houston.

Figure 1. Diversion & Caution of Level I
(Ben Taub & Memorial Hermann), Yr '03 - June '05



utilization of emergency rooms in neighboring hospitals and resulting delays in medical treatment provided to critically ill or injured patients as they are driven to hospitals that are farther away. Data relating ER overcrowding to hospital diversion of ambulances is available for Houston hospitals. Figure 1 shows the pattern of hospital diversion and caution in total hours per month for the two Level I centers in Houston (Ben Taub and Memorial Hermann) from January 2003 through June 2005 (Rives). Diversion hours indicate when the hospitals were unable to provide appropriate care to all trauma patients. Caution hours, which Houston hospitals began reporting in April 2003, indicate when the hospitals were only open for some trauma patients. During 2003, these two hospitals experienced high levels of diversion totaling 4,366 hours (50.2 percent of the available total open time). This number was reduced to 2,857 hours in 2004 with additional reductions in 2005. For 23 of the 30 months, the hospitals were on diversion or caution more than 27 percent of the time. For 10 of the months, they were on diversion or caution more than 55 percent of the time.

The hospitals also reported the reasons for going on diversion (medical saturation, trauma saturation, ER saturation) and caution (CT scan down, equip down, no burn beds, no medical/surgical beds, no neurology beds, no psychiatry beds, no pediatric beds, no telemedicine beds). ER saturation was reported as the reason for 46 percent of all diversion hours for these two hospitals in 2003 - 2005.

Studies have shown the impact of diversion on the volume of patients treated at overloaded hospitals (Schull, et al., 2003) (Lagoe et al., 2003), ambulance transit time of diverted patients (Scheulen et

al., 2001) (Silka et al., 2001), and a possible association with higher mortality (Begley et al., 2004). Begley et al. compared death rates of trauma patients hospitalized in Houston on significant diversion days, defined as days when both Level I hospitals were on diversion for more than eight hours, and non-significant diversion days when one or both hospitals were on diversion for less than eight hours or not on diversion at all. The study found that the percentage of deaths among all trauma patients, both those transferred and those not transferred, admitted on significant diversion days was consistently higher than on non-significant diversion days.

Additional research is needed to confirm these relationships, but the combined findings from the mortality study, the diversion data and the ER use data suggest that:

1) Delays in treatment of trauma patients caused by hospital diversion may increase mortality,
2) Diversion is frequently caused by saturation of the ER and,
3) Primary care-related ER use of trauma centers contributes to ER saturation.

State and Local EMS/Trauma Leadership

Despite chronic funding issues, concerted efforts have continued to build and strengthen the regional emergency and trauma system in Texas. At the state level, GETAC remains a respected forum for policy-making and planning. With committees that focus on medical direction, pediatric care, trauma system development, EMS, injury prevention, education and air medical issues, GETAC's quarterly meetings draw hundreds of trauma center representatives and leadership of EMS agencies from across the state to continue its charge of providing input and leadership on emergency and trauma care issues.

Several trauma regions in Texas have pursued initiatives designed to make improvements in their systems' response and function, while others have accomplished very little. In July 2005, the Austin-Travis County area announced that hospitals had reached an agreement to not divert ambulances to other hospitals when faced with routine or on-going capacity challenges (Roser, 2005). Austin area hospitals recognized the use of diversion was not in the best interest of the patient and have agreed to no longer refuse ambulance delivery unless their facility is dealing with a particular and short-term disaster, such as flooding or loss of heating or air conditioning.

In recognition of the challenges rural and suburban hospitals have in seeking to transfer their patients who need a higher level of care than they can provide, the North Central Texas Trauma RAC in the Dallas-Fort Worth area has established a formal hospital transfer process. Hospitals needing to arrange a patient transfer contact a toll-free number for the Trauma Transfer Hotline. Dispatch workers contact contracted hospitals, on a rotating basis, which can provide a higher level of care. They inquire whether they have the capability or capacity to accept this patient transfer. Hospitals have a contracted 15-minute window to accept the transfer before the dispatch center contacts the next hospital on the list. This system has been an effective process for hospitals in the outlying areas to arrange patient transfers in a seamless and timely way. (Dunne, 2005).

The Southwest Texas RAC in the San Antonio area has implemented a unified identification badge for EMS personnel, nurses and physicians throughout the region to not only improve security but decrease frustration related to facility access. The ID badge is also a security keycard to

gain entrance to hospital emergency departments, freeing emergency medical technicians and paramedics from having to remember separate security codes for each hospital and allowing physicians quick parking access to the different hospitals they staff. Another initiative in the San Antonio area is the development of the Regional Medical Operations Center. Initially a response to 9/11 events, the vision for this center was expanded to focus on disaster preparedness and crisis response, whether natural or man-made. It serves as a combined dispatch and transfer center during times of identified crisis that integrates public health, acute care and EMS. Once activated by either the public health officer, the emergency management coordinator or a hospital CEO, the center identifies hospital bed availability in the region, assesses the stockpile of critical medications, arranges patient reception if necessary and coordinates identified medical personnel needs. The center activated for the first time in the fall of 2005 in preparation for receiving Hurricane Katrina evacuees to the San Antonio area and stayed in operation to do the same for Hurricane Rita evacuees from southeast Texas (Epley, 2005).

With a growing diversion rate, Houston area physicians, hospitals and the business community began to work together to find solutions for the growing trauma and emergency services crisis in the Texas Gulf Coast region. They created Save Our ERs in late 2001 with goals to educate the public and implement regional solutions to help ensure that the Gulf Coast's trauma system could meet the area's growing needs. Local task forces were begun to explore these issues and four major studies were commissioned to measure the impact of the lack of resources on this community (Save Our ERs, 2003).

In response to the growing crisis, the Houston-Galveston Area Council created the Emergency/Trauma Care Policy Council in 2003. The Policy Council was designed to examine policy options and possible strategic initiatives to improve the functioning of the region's emergency and trauma care system. Its data committee has begun to measure hospital diversion in the eight-county region through EMSystem data provided by the Southeast Texas Trauma RAC. The committee has worked with the TDSHS for access to the region's trauma registry data to measure EMS response time and hospital trauma admissions. The Policy Council's long-range planning committee selected a nationally respected EMS and trauma care consulting firm to provide the region with a road map for system improvements (Houston-Galveston Area Council, 2006).

Response to Disasters

In 2005, Hurricanes Katrina and Rita highlighted the need for enhanced integration of emergency services at the regional and state level. While some regions met the challenges of these crises ably, there is an underlying need to see greater responsiveness and integration with local disaster planners, emergency medical services, tertiary and trauma care hospitals, RACs, and Texas Department of Transportation and other state agencies. The needs of evacuating citizens, as demonstrated by Hurricane Rita, require collaborative work across state agencies, municipalities, counties and emergency health care providers. Likewise, the health care needs of the Hurricane Katrina evacuees mobilized unprecedented collaboration on the regional level. However, many issues still remain unresolved.

To address these problems, a review of lessons learned from Hurricanes Katrina and Rita should

be performed and a model of active cooperation and collaboration should be developed. The role of multiple agencies of the state needs to be examined in light of the need for improved coordination and response. The state's different regions for disaster areas, public health and TSAs may be creating an unnecessary barrier for communication and response. After the storms, disaster coordinators were obligated to work with multiple public health regions and trauma regional advisory councils were required to work with several disaster coordinators. Standardization of regional subdivisions should be explored to improve efficiencies in planning, communication and responsiveness.

Summary

Texas has done significant work to develop its emergency and trauma systems. This includes ensuring 9-1-1 capability in all 254 counties. Unfortunately, while the 9-1-1 service is available, there are still considerable challenges for trauma care—including having adequately funded EMS services to pick up patients as well as a hospital to deliver them to (due to the current burden on emergency departments). With the Driver Responsibility Program, Texas has one of the richest authorized funding sources for trauma centers in the entire country. With full implementation, this source will meet a substantial portion of the need.

A significant challenge in trauma care is the overcrowding of ERs in the state. While trauma centers have been organized, they still are often unable to handle the patient load due to the increasing numbers of admissions. As a result of EMTALA, which requires medical screening and stabilization of patients, many people are using emergency departments as sources of primary care. In addition, the uninsured and underinsured are a disproportionate segment of ER use in trauma hospitals, many of which are unable to pay for the services obtained. Consequently, the ability of trauma centers to carry out their mission is related to efforts to provide safety-net primary care clinics in underserved areas of the state. This may include assessing, identifying or funding care-givers including nurse practitioners, physicians, residents and nurses.

It is clear that much remains to be done for Texas to become a leader in regionalized emergency and trauma care systems. Some of the challenges are symptomatic of much larger issues – the growing uninsurance problem, bioterrorism, natural disasters – but efforts must continue to be made to shore up the system through funding mechanisms, oversight, and infrastructure development.

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[Chapter Nine]

Education and Health

Education plays critical and wide-ranging roles in our society. In addition to imparting certain cognitive and interpersonal skills necessary for productive functioning, it also exerts a formative influence on the identities, norms and sentiments that work to integrate individuals into the larger society. Furthermore, education is widely believed to be the key to social and economic advancement, with higher educational attainment thought to bring higher status, greater rewards and more valued accomplishments. Unfortunately, our system of mass, public education does not work equally well for everyone. Those whose academic performance is compromised will sacrifice educational attainment, the promise of upward mobility, and more importantly, their health. In short, higher education yields better health and with each increase in level of education, there appears a positive difference for health status.

Yet, the interaction between education and health is both complex and cyclical. Health in childhood affects academic performance; while in adulthood, level of education has a lasting effect on health prospects. A number of studies have attempted to elucidate parts of this interaction. Here, we consider the evidence on how educational attainment affects health status in adults, but concentrate on the linkages between chronic health conditions in children and their academic performance. Children of parents with lower educational attainment tend to model the poorer health prospects of their parents. As these children become adults and have offspring of their own, a pattern or cycle develops. If we intervene in the health of children through certain school-based programs, the negative cycle can be broken. In other words, we improve not only children's health, but also academic performance, and subsequently educational attainment. This influences a life course that positively shapes the lives of future generations.

In this chapter, we will first identify the most prevalent chronic health conditions in school-age children, and then examine the available evidence documenting the impact these conditions have on academic performance. Next, we examine assessments of interventions intended to prevent or improve these health conditions. We then turn our attention to the adult portion of the cycle, reviewing the extensive evidence relevant to the link between educational attainment and health in adulthood. Finally, we shift away from an examination of the evidence behind the various links between education and health to consider the issue of policy recommendations. In this context, we will inventory the recommendations and pay special attention to the current status of state policy in Texas. This chapter is based on a white paper submitted to the committee. The full text of the white paper is included in the report as Appendix E.

Childhood Health Conditions, Academic Performance and School-Based Interventions

Prevalence of Chronic Conditions and Their Links to Academic Performance

Chronic conditions impact students in diverse ways. In the short term, chronic health conditions among children may affect school attendance, cognition

and behavior in the classroom, test-taking abilities, and social relationships. In the long term, chronic health conditions in childhood may affect academic achievement, grade advancement and school completion. We discuss prevalence, effect on academic performance, and the potential for academic enhancement through school-based interventions for each of these conditions. Because of our interest in non-medical, school-based interventions, much of our attention focuses on overweight, asthma and diabetes. Other conditions relevant to consider that are not discussed are depression, epilepsy, sickle cell anemia and sleep disorders.

Overweight and Obesity

Overweight and obesity in children are widely perceived to be reaching alarming prevalence in schoolchildren. The percentage of overweight students in Texas was found to be 22.4 percent in fourth grade, 19.2 percent in eighth grade, and 15.5 percent in eleventh grade (Hoelscher et al., 2004). The prevalence is even higher for Hispanic boys in Texas, who have prevalence data ranging from 14.2 percent to 32.6 percent. The drastic proportion of overweight children has clear implications for public health, given its ties to both adult obesity and diabetes. Recent studies also indicate that children who are overweight have lower reading and math scores (Datar et al., 2004). Other studies indicate that obese children consider themselves to be poor students and are more likely to be held back a grade. Given the current prevalence of overweight conditions among children and the finding that as children age, their later weight depends primarily on their earlier weight (Kelder et al., 2002), by the time they reach high school, we can expect that between a quarter and a third of them will be more likely to be held back a grade, consider themselves poor students, and expect to quit school based on their overweight status. The evidence suggests that obesity not only poses serious health risks, but also jeopardizes academic achievement.

Asthma

The National Health Interview Survey conducted in 2002 revealed that 9 million U.S. children under the age of 18 have been diagnosed with asthma during their lifetime; that is 12 percent of U.S. children. Asthma studies in Texas indicate a prevalence of 15 percent (Arif et al., 2004), although many researchers fear that this condition is under-diagnosed and underreported. The impact of asthma on academic performance is complex; however, there is substantial evidence that children with asthma are more likely to be absent from school (Fowler et al., 1992) (Freudenberg et al., 1980; Joseph et al., 1996) (Maier et al., 1998) (O'Neil et al., 1985) (Parcel et al., 1979) (Silverstein et al., 2001) (Yeatts & Shy, 2001). This absenteeism translates into lower academic performance, principally among those from poorer households. Unfortunately, absenteeism also has implications for school funding. Each absent child costs the average school district about $18 per day in lost state revenue. On average, children with asthma are absent about five extra days per year. The evidence for the impact of asthma on academic achievement is complex but does suggest that asthma is related to school absences and may adversely affect academic performance for children from poor households. In addition, obesity has been found to be a risk factor for asthma in children (Bibi et al., 2004).

Diabetes

The prevalence of diabetes is much lower than either obesity or asthma. About 151,000 people in the United States below the age of 20 years have diabetes. Behavioral Risk Factor Surveillance data from

2003 reports that 8.1 percent of Texas adults say that a doctor has told them that they have diabetes, an increase over the nationwide rate (7.2 percent) (CDC, 2005). Most alarming is the sudden increase in type 2 diabetes (formerly referred to as adult-onset) among children. Prior to 20 years ago, only 1 to 2 percent of diabetes cases in children were attributed to type 2. More recent estimates indicate 8 to 45 percent of all new cases of diabetes in children are due to type 2 (Aye & Levitsky, 2003). It is important to note there is a strong correlation between type 2 diabetes and obesity. Children with diabetes are more likely to have a reduction in neuropsychological functioning, to be absent from school and to perform at lower levels on academic measures over time, particularly in reading. Compared to non-diabetic children, diabetic children present significantly lower scores on school achievement scores such as arithmetic, reading and spelling (Gath et al., 1980; Ryan et al., 1985a); increased learning difficulties; lower grades in English and language arts; more grades repeated; and special instruction received (Hagen et al., 1990; Holmes et al., 1992; Yu et al., 2000). They were absent more frequently from school (Holmes et al., 1992; McCarthy et al., 2002; Ryan et al., 1985a; Yu et al., 2000), and their absence rate was associated negatively with their grade point average and academic achievement (Kovacs et al., 1992; Ryan et al., 1985a).

School-Based Interventions and Their Links to Health Conditions

There is a strong body of research evaluating the effect of school health programs incorporating physical education and/or nutrition service interventions on overweight children and factors related to overweight such as physical activity, fat consumption and television-watching. Among other examples in the elementary school level, the Child and Adolescent Trial for Cardiovascular Health (CATCH) was a multi-component, multi-year coordinated school health project designed to decrease fat, saturated fat and sodium in children's diets, increase physical activity and prevent tobacco use. The experimental trial of CATCH is conducted in 96 schools (56 intervention, 40 control) in four sites (California, Louisiana, Minnesota and Texas). At the completion of the trial, students exposed to the intervention consumed less fat and participated in more physical activity outside of school; school cafeterias provided meals that were lower in fat; and students were more physically active during physical education classes (Luepker et al., 1996). The CATCH cohort of students was re-measured three years after the original intervention ended (in eighth grade), and positive effects were maintained.

Still other programs are helpful to consider. The Eat Well and Keep Moving Program was effective in improving dietary intake of students and reducing television viewing (Gortmaker et al., 1999a). At the middle school level, the Planet Health program was effective in reducing television viewing hours among both girls and boys, and increasing fruit and vegetable consumption. Among girls, each hour of reduction in television viewing predicted reductions in obesity (Gortmaker et al., 1999b). The middle school MSPAN program improved moderate to vigorous physical activity in physical education classes, more for boys than for girls (McKenzie T. L. et al., 2004).

A review published in *The Journal of Pediatrics* in June of 2005 (Strong et al., 2005) of the effects of physical activity on health outcomes such as overweight and obesity, cardiovascular health, asthma, mental health, injuries, musculoskeletal health and fitness, and academic performance concludes that there is

sufficient evidence to support a recommendation of 60 minutes per day of moderate to vigorous physical activity for school-age youth.

There is a also a large body of literature examining the effect of physical activity on mood-related mental health issues such as depression and anxiety and concluding that physical activity benefits both clinical and nonclinical populations (Dunn et al., 2001; Landers & Petruzzello, 1994; Morgan, 1994; Office of the Surgeon General, 1996). Furthermore, there is evidence that interventions designed to increase physical activity are effective in decreasing depressive symptoms among high-risk youth, free-living youth and clinic populations (Hawkins et al., 1999; Norris et al., 1992; Tortolero et al., 2001). Unfortunately, the results of school-based depression prevention programs have been mixed.

School-based programs for children with persistent asthma hold promise for improving disease management, reducing disease severity and decreasing school absences. Tinkelman (Tinkelman & Schwartz, 2004) reports a case study of the DSCM asthma school program incorporating a respiratory nurse care manager, web-based interactive educational tools, and an interactive asthma diary for 41 elementary and middle school public school students. The study also used a telephone-based educational disease management program for parents. At six months, students had two-thirds fewer unscheduled doctor visits, daytime frequency of symptoms dropped by 62 percent and nighttime frequency of symptoms dropped by 34 percent. Several other studies also support these findings. While the research on school-based asthma programs is limited by issues of design and sample size, the findings suggest promise for management of asthma symptoms and savings in health care utilization.

School-Based Interventions and Their Links to Academic Performance

School-Based Physical Activity Interventions

A rigorous evaluation of Project SPARK, an elementary school physical education program, demonstrated significant gains for reading, losses for language, and no differences for math scores on a standardized test, suggesting that, even with time taken away from the academic program for physical education, overall academic functioning was not impaired (Sallis et al., 1999). This and other studies suggest that implementation of physical education will not impair academic achievement on standardized tests, and implementation of asthma management programs may enhance academic grades for low-income asthmatic children.

The association between fitness and school performance has been examined by the California Department of Education utilizing a state-required physical fitness test reported for all fifth-, seventh-, and ninth-grade students since 2001 and the Stanford Achievement test. This cross-sectional analysis demonstrated a significant linear association between standardized test scores (Stanford Achievement Test Ninth Edition [SAT-9]) of almost 1 million students and their fitness scores on the Fitnessgram, a teacher-administered physical fitness test measuring cardiovascular endurance, body composition, abdominal strength and endurance, trunk strength and flexibility, upper body strength and endurance, and general flexibility (California Department of Education & Standards and Assessment Division, 2002; Grissom, 2005). The highest SAT-9 scores were reported by students who met three or more standard levels among the six physical fitness measures. While the Fitnessgram does not represent a school program, but rather a measurement of fitness,

these data suggest a relationship between levels of physical activity sufficient to develop and maintain fitness and academic performance as measured by a standardized achievement test.

School-Based Nutrition Interventions

Some students may not achieve academic superiority because they are undernourished, thus hindering their ability to learn. It has been suggested that even moderate undernutrition can potentially have long-lasting effects on a child's cognitive development and performance in school (Center on Hunger and Poverty and Nutrition Policy, 1998). In addition, research shows that failure to eat breakfast can have adverse affects on children's ability to problem-solve in school (Pollitt, 1995; Pollitt et al., 1981; Pollitt et al., 1982). More recent studies have documented similar results of higher test scores in nourished children compared to their undernourished counterparts (Murphy et al., 1998; Powell et al., 1998). These studies also found that the children participating in the School Breakfast Program (SBP) had fewer absences and tardies than those who did not participate in the SBP (Murphy et al., 1998; Powell et al., 1998). Other researchers focusing on a child's social and emotional well-being have found that the undernourished child tends to be less active, more anxious, and interacts less with his or her classmates and peers (Barrett et al., 1982; Rampersaud et al., 2005).

Eating patterns and other health-related habits tend to be established in early childhood, (Munoz et al., 1997). Given that schools have the potential to shape and direct the development of the students, nutrition education programs implemented and adopted by schools may play a large role in helping improve a child's chance for higher academic attainment along with improvements in their health status related to nutritional intake. Many elementary school children depend on school meals, deriving approximately 50 to 60 percent of total daily intake of energy, protein, cholesterol, carbohydrate and sodium from school meals (Nicklas & Johnson, 2004). School nutrition programs will be very important in efforts to prevent obesity in children and are also likely to have a positive impact on academic performance.

School-Based Asthma Management Interventions

Few school-based asthma management programs have been evaluated. The most rigorous evaluation was conducted by Evans et al (Evans D. et al., 1987) using random assignment of 12 New York schools within matched pairs. Participants included 239 low-income predominantly Hispanic and African-American students from third to fifth grade who experienced at least three episodes of asthma in the last year. The asthma self-management program consisted of six 60-minute sessions on asthma management skills for the students and written information on curriculum and activities for the parents. Asthma program students performed significantly better than control students on classroom grades in mathematics, science and oral expression, but no effect of the program was evident for standardized test scores for reading or math, for teacher-rated classroom behavior or for attendance. The mixed results for the effects of the programs on school attendance is disheartening given that asthma is considered to be the leading cause of school absences (Tinkelman & Schwartz, 2004). However, the studies are limited by weaknesses in design and sample size and challenges in the accurate measurement of school absences along with the cause of the absence. More work needs to be done in both the development and implementation of school-based asthma management programs and the evaluation of those programs.

School-Based Mental Health Interventions

Gall and colleagues (Gall et al., 2000), found that among 13- to 18-year-old public high school students, two months after they received school-based mental health and counseling services, absenteeism decreased by 50 percent and tardiness decreased by 25 percent. Students referred for mental health services significantly decrease absence from school by two-thirds of a day while those not referred increased both absenteeism and tardiness. These studies are not specific to depression programs, but do suggest that the school component most likely to be responsible for depression prevention programs may have success in impacting academic factors such as absenteeism.

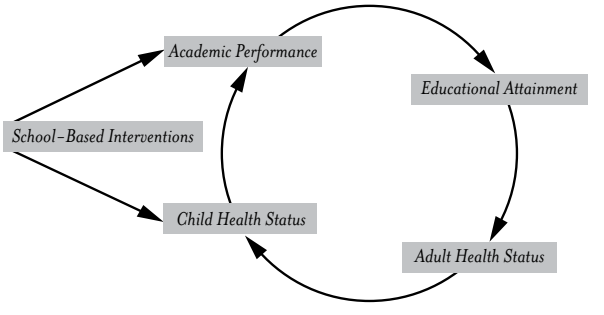
Coordinated School Health Programs

School health programs are currently considered within the context of the Coordinated School Health Program (CSHP) model. CSHP provides policies, activities and services in an organized manner to promote the health of school students and staff through: comprehensive school health education; family and community involvement; physical education; school counseling, psychological and social services; school health services; school nutrition services; and school-site health promotion for staff and faculty (McKenzie F. D. & Richmond, 1998). Programs may be designed for the general population of school children, such as those that target physical activity and nutrition, or for indicated groups of children identified with health problems such as asthma. As described earlier, chronic conditions such as obesity, asthma and diabetes negatively impact school performance. Coordinated School Health Programs improve the health of students. It logically follows these school-based health programs will result in better school performance.

Educational Attainment and Adult Health Status

Most of the studies that considered the impact of interventions focused on health as their endpoint and not on academic achievement. Part of this may have been a function of the interests of the organizations who fund the research; those with health missions were not accountable for improvements in academic performance. This chapter also seeks to determine the reverse relationship: that of academic performance on health. Studies in school-aged children have indicated that poor school performance predicts health-compromising behaviors and physical, mental and emotional problems (Crum et al., 1998; Kessler et al., 1995; Miller D. S. & Miller, 1997; Young & Rogers, 1986). There is a body of evidence that suggests academic performance, particularly test scores, predicts level of attainment. However, focus should not merely be on the linear relationship, but also the intergenerational and cyclical nature between education and health (see Figure 1). Parents and families profoundly influence their children. Those children develop as adults and form family units of their own. The interplay of health and education is perpetuated in the family cycle. Future generations will be influenced by what is done in the present. From this point forward, the chapter will more fully focus on how education level affects health outcomes.

Figure 1: The Cyclical Nature between Education and Health



Background on Social Status and Educational Attainment

Education as an indicator of socioeconomic status is an important determinant of health. Socioeconomic status refers to the individual's position or status in society's hierarchy. Income, education, occupational status and social class are all indicators of socioeconomic status and have been shown to be important determinants of health (Antonovsky, 1967; Backlund et al., 1996; Evans R. G. et al., 1994; Kunst M. & Mackenbach, 1994; Marmot M. et al., 1987; Marmot M. & Shipley, 1996; Sorlie et al., 1995).

Current research has documented a health gradient based on socioeconomic status. In other words, the more education one has, the healthier one will be. It is a dose-response relationship rather than a threshold effect. As level of education increases, so does a variety of measures of health status; the relationship is not limited to those with the worst education having the poorest health while everyone else is fine. Studies have shown that better educated people are healthier, report better health, and have lower mortality, morbidity and disability. Socioeconomic status is usually measured by income, education, occupational status, social class or a combination of these factors. Among these measures, education stands out as the most basic socioeconomic status component since it shapes future occupational opportunities and earning potential (Adler & Newman, 2002). Education is considered the primary and core status dimension that influences all other dimensions of status throughout the lifetime (Mirowsky & Ross, 2003). Education is the antecedent to all other measures of socioeconomic status as it comes early in life and influences all other measures of socioeconomic status. The association between socioeconomic status and health becomes more robust when socioeconomic status is measured by education (Fuchs V. R., 1979; Kitagawa & Hauser, 1973; Lebowitz, 1977; Liberatos et al., 1988; Williams D. R., 1990). These results taken together have lead researchers to conclude that education is the best socioeconomic status predictor of health status (Williams D. R., 1990). It has also been shown that those who are less educated have lower health literacy (or more difficulty understanding and acting upon health information), a higher risk of infant mortality, and are more likely to develop risk factors related to poor health.

The Links between Educational Attainment and Adult Health Status

In general, better educated people are healthier, report better health, and have lower mortality, morbidity and disability (Coburn & Pope, 1974; Ross C. E. & Van Willigen, 1997). Ross and Mirowsky (Ross C. E. & Mirowsky, 1999) have shown that the quality of the education received and of the educational environment increase the positive effects of education on health. The evidence that more education is associated with better health is strong (Deaton & Paxton, 1999; Grossman & Kaestner, 1997; Kaplan & Kiel, 1993). We will continue by examining the specific links between educational attainment and adult health.

Health Literacy and Health Knowledge

While education improves health, lack of education, and the resulting low literacy, is associated with poor health. Literacy improves health knowledge and skills in managing their disease in patients with hypertension, diabetes and asthma (Williams M. V. et al., 1998a; Williams M. V. et al., 1998b).

Mortality

A strong inverse relationship between years of education and all-cause mortality is reported by

Elo and Preston (Elo & Preston, 1996). Actuarial estimates show five to six year differences in life expectancy between the least and the most educated (Rogot et al., 1992).

Infant Mortality

Infant mortality is a key indicator of health and well-being of societies (UNICEF, 2003). One of the best predictors and contributors to fetal and infant mortality is thought to be low birth weight (Chen et al., 1998; Newland, 1981; Shapiro et al., 1980; Shoham-Yakubovich & Barell, 1988). Research has shown that mother's educational level is inversely related to both infant mortality (Arntzen & Nybo Andersen, 2004; Arntzen et al., 2004; Buor, 2003; Gisselmann, 2005; Olsen & Madsen, 1999; Pena et al., 2000) and low birth weight (Chen et al., 1998; Shapiro et al., 1980). Infant mortality risk decreases as the mother's educational level increases (Bicego & Boerma, 1993; Burne & Walker, 1991; Caldwel, 1979; Newland, 1981; Wagstaff et al., 2004).

Morbidity and Chronic Disease

There is evidence of a morbidity gradient based on education. Mirowsky and Ross (2003) report that less educated persons are more likely to suffer from common chronic conditions, with the exception of cancer.

Self-Rated Health

Evidence accumulated for more than 20 years indicates that self-rated health (SRH) is a powerful and reliable predictor of clinical outcome and mortality, even 10 years after the initial self-rating (Fayers & Sprangers, 2002; Idler & Angel, 1990). Education improves the likelihood of people feeling physically fit, having lots of energy, enjoying life, being happy and feeling hopeful about the future. Education decreases the likelihood of having trouble sleeping, finding everything an effort, being unable to get going, having trouble keeping one's mind on things, and suffering from backaches and headaches (Mirowsky & Ross, 2003).

Risk Factors

The educated tend to have healthier lifestyles than those with less education. Researchers in diverse disciplines have noted that more educated persons are more aware of health risks and more likely to initiate actions to reduce these risks (Williams D. R., 1990). The more educated exercise more, are less likely to drink in excess, smoke less, and are less overweight than those with less education (Ross C. E. & Bird, 1994; Ross C. E. & Wu, 1995). Furthermore, health education campaigns are more effective in producing behavioral changes in better educated people.

Education and Health Care Costs

Low (2005) provides strong evidence that literacy predicts health care costs. In the 1990s, Medicaid recipients at the lowest literacy levels had annual health care costs of $12,974 compared to $2,969 for the overall Medicare population and were twice as likely to have been hospitalized in the previous year than patients with higher literacy (Weiss, 1999). Low literacy is responsible for about $73 billion annually in avoidable health care costs according to an estimate by a National Academy study on Aging Society.

How Educational Attainment Affects Adult Health Status

Education as learned effectiveness directly improves health, increases the sense of personal control, and enhances material, social and psychological resources. There are several possible explanations as to why education levels affect adult health, and we will focus on several of these explanations including

the human capital view, personal control, and occupation and social resources.

The Human Capital View

The human capital approach suggests that education improves the individual's ability to produce health. Education is a root cause of health in that it gives individuals the capacity to control and shape their own life in a way that promotes good health. The skills, knowledge and resources acquired in school build abilities (the human capital) that increase effective agency and can be used to foster health. The process can thus be described as "education as learned effectiveness" (Mirowsky & Ross, 2003). Education enables people to integrate health-producing behaviors into a lifestyle, and this lifestyle leads to control, augmenting the ability to use education as "capital" to produce health.

Personal Control

From this perspective the primary link between education and health is the sense of personal control that leads to the adoption of a healthy lifestyle (Mirowsky & Ross, 2003). As this perspective implies, education promotes a belief that the individual can alter his or her environment, which ultimately leads to adoption of a healthy lifestyle. Education also provides material resources, primarily a higher income. Several studies have indicated the positive effect of income on health. Individuals with a sense of personal control feel they can control and alter the environment they live in. It is the opposite of perceived powerlessness where individuals see no link between efforts and outcomes and feel they have no control over their life. Internal control (Rotter, 1966), mastery (Pearlin et al., 1981) and self-efficacy (Bandura, 1986) and, on the opposite end, fatalism (Wheaton, 1980), helplessness (Seligman, 1975) and perceived powerlessness (Seeman M., 1983) are some of the names under which sense of control has been studied in psychology and the social sciences. The sense of personal control is learned through experience. Education increases the sense of personal control because school builds the skills, abilities and resources that allow better-educated people to have a rich experience of success at avoiding and solving problems, thus reinforcing their belief that their own behavior can favorably affect outcomes (Mirowsky & Ross, 1989; Ross C. E. & Mirowsky, 1992; Wheaton, 1980). Education teaches problem-solving skills and confidence.

Employment, Occupation and Work

Occupation is another possible link between education and health. Better educated people tend to work in jobs that are more rewarding financially and personally. Lower-educated individuals, particularly men, tend to be employed in more hazardous occupations. Employment, occupation and work have been posited as links between education and health. Better-educated people are more likely to be employed, to have jobs that are better paid, and that are more satisfying because they allow autonomy and reward creativity. Education brings people into the labor force and keeps them at the highest level of participation: full-time employment. Mirowsky and Ross (2003) estimate that, on average, each additional year of education increases the odds of full-time employment by 11 percent, decreases the odds of being unemployed by 10 percent, and decreases the odds of being unable to work, because of disability by 23 percent. Education also improves the stability of full-time employment by decreasing the probability of ever having been unemployed.

Health Improves Steadily with Participation in the Labor Force

Persons in full-time employment have the best health and those unable to work have the worst health (Mirowsky & Ross, 2003). Mirowsky and Ross (2003) find evidence that employment and health are in symbiotic relationship, "Just as full-time employment helps individuals to stay or become healthy, health helps them stay or become employed full-time." Selection seems to be a minor mechanism in the relationship between employment and health and to be declining over time. Better-educated workers are less likely to be in harsh or dangerous occupations (Mirowsky & Ross, 2003).

Social Resources

Better-educated people are more likely to be married and tend to have more stable and supportive relationships (Mirowsky & Ross, 2003). Social support, and in particular marriage, are protectors of health. Married people have better health than those who are not married, probably because they face less economic hardship, have more social support, especially emotional support, and lead a more orderly and regulated life. General social support improves psychological well-being that is associated with better physical health. Married people also tend to have more contact with the health care system resulting in earlier detection and treatment of disease. The effect of marriage on health behaviors is mixed. Married people are less likely to smoke or to drink heavily, and are less prone to injuries and risky sexual behavior. However, they are less likely to exercise and more likely to be overweight (Mirowsky & Ross, 2003).

Interventions in Early Childhood

The period during which brain development is the most rapid and important is in the first three to five years of life. Early life conditions affect ability to learn and are important predictors of future academic success (Low, 2005). Several studies have reported a strong relationship between early life conditions and dropping out of high school (Jimerson et al., 2000), later performance in school, adult literacy, health status, and mortality (Keating & Hertzman, 1999). Readiness to learn when entering kindergarten has been associated with mathematical achievement in eighth grade (Fuchs V. R. & Reklis, 1997).

There is evidence that readiness to learn for at-risk children in the pre-kindergarten years can be improved through intervention. Though health effects have not been established, there is suggestive evidence that programs such as Head Start and the Perry Preschool Project may confer long-term benefits (Hertzman, 1999). Pre-school enrichment programs have been shown to improve the cognitive and social capacity of poor children at high risk. The evidence presented in this section corroborates the importance of education to health and provides justification of why investing in education and evaluating and improving policies related to education have an imperative relevance. According to Census 2000 data, 24.3 percent of adults in Texas do not have a high school diploma. That is more than the percentage of adults with a college degree (15.6 percent) or graduate or professional degree (7.6 percent). These averages reflect great variation in educational attainment by racial/ethnic status as shown in Table I. Improvement in the educational attainment of Texans would result in better health status, lower morbidity and mortality, and lower health care costs in Texas.

Table I – Educational Attainment in Texas by Racial/Ethnic Groups

	Less than high school	*High school diploma/no college degree*	*College degree or higher*
Non-Hispanic, whites	*12.8%*	*57.2%*	*30.0%*
Hispanics	*50.7%*	*40.4%*	*8.9%*
African Americans	*24.2%*	*60.5%*	*15.3%*
Asians	*19.3%*	*32.9%*	*47.8%*

Source: 2000 Census obtained from Texas State Data Center

Summary

Through this analysis, we were able to further establish the correlation between education and health. We began by identifying the most prevalent chronic health conditions in school-age children, and then we examined the available evidence documenting the impact these conditions have on academic performance. Next, we studied assessments of interventions intended to prevent or improve these health conditions. We then considered the adult portion of the cycle, reviewing the evidence relevant to the link between educational attainment and health in adulthood.

If chronic conditions increase absenteeism, they also result in a cost burden for schools, given that student attendance rates influence school funding. If average daily attendance is increased by 1 percent, Texas school districts could receive an additional $130 million from the state. Interventions that reduce absenteeism for less than about $18 per student will pay for themselves, over and above the benefits brought to the children they serve. In this chapter, three approaches have stood out for consideration:

- Increase school-based nutrition interventions,
- Increase physical activities during school, and
- Implement asthma management programs for students and parents.

School-Based Nutrition Intervention

Failure to eat breakfast and undernutrition have been shown to adversely affect children's ability to problem solve in school and potentially have long-lasting effects on a child's cognitive development and performance in school. One recent study indicated that children in a School Breakfast Program (SBP) had increased language, math and reading scores, as well as reduced tardiness. Unlike many other areas of school health, the affects of this intervention on academic performance are consistent and significant.

The Texas Department of Agriculture established the Texas Public School Nutrition Policy, which addresses the issue of SBP, along with other nutrition and food service policies in public schools. For the fiscal year 2003-2004, 6,903 Texas schools participated in the SBP. This is impressive when one considers there are 7,009 public schools in Texas (Texas Department of Agriculture, 2004). However, according to the Texas Joint Interim Committee on Nutrition and Health in Public Schools, Interim Report to the 79th Legislature, only 26 percent of students are actually getting a school breakfast (Joint Interim Committee on Nutrition and Health in Public Schools, 2004). Based on compelling evidence of impact on academic performance, the school breakfast program should be extended to a larger number of students as a reliable means of improving academic performance while, at the same time, addressing chronic under-nourishment.

School-Based Physical Activity Interventions

The benefits of physical activity on health are well accepted; however, there is evidence that increasing its presence in school curricula does not impair academic achievement and may also improve school performance. Based on these findings, the requirement of physical activity in Texas schools should be increased. The Texas Administrative Code (TAC §74.32) requires enrolled K-6 students to participate in 60 minutes or more of moderate to vigorous physical activity based on the most current research (National Association of State Boards of Education). The U.S. Department of Human Services and U.S. Department of Agriculture recommends a minimum of 30 minutes per day or 135 minutes per week of physical activity (National Association of State Boards of Education). Given the strength of the evidence, Texas schools should increase their physical activity requirements to 60 minutes per day.

School-Based Asthma Management Interventions

The effectiveness of programs for asthma management has been well-documented in well-designed studies. Not only was absenteeism reduced, but test scores improved in a number of areas. While Texas has policies that address environmental triggers of asthmatic episodes, there is no written policy on asthma education programs for children or staff or recommendations for schools to consider them. Based on compelling evidence, Texas schools should adopt asthma management education for affected children and support staff.

In order to break the self-perpetuating cycle of health in childhood affecting academic performance; while in adulthood, level of education has a lasting effect on health prospects, intervention is necessary. Solutions should focus upon the health of children through certain school-based programs that address the general population and certain groups suffering from chronic conditions like overweight, asthma and diabetes. If the negative cycle is broken, the potential implications are far-reaching and include improved health, academic performance and subsequent educational attainment.

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[Chapter Ten]

Task Force Findings

During its deliberations, the Task Force heard presentations from a number of individuals and groups (see Appendix J for a list of presenters). The presentations were very high quality and extremely informative. The Task Force had the benefit of six commissioned papers from experts, which are included as Appendices B through G of this report and summarized in relevant chapters. After reviewing these materials and extensive discussion and deliberation, the Task Force came to a number of conclusions which are reviewed in this chapter.

The overall health status of Texans is poor, particularly in comparison to other states in our country, and is likely to decline further without major and immediate interventions.

One example of poor health status is the low rate of vaccinations, an important preventive health measure. Texas ranks 45th of the 50 states in vaccine rates for children aged 19 to 35 months (TDH, 2003). Not surprisingly, the failure to adequately vaccinate this population results in increased morbidity of unvaccinated individuals. In 2003, the pertussis (whooping cough) morbidity rate in Texas was 73 per 100,000 for Hispanic infants and 40 per 100,000 for non-Hispanic infants (TFFPHT, 2005) compared to the national rate of 4 cases per 100,000 (CDC, 2005).

Residents of Texas are experiencing an incipient epidemic of diabetes and obesity (TDSHS, 2006). Furthermore, Texas lags in the number of mammograms women receive, a means to detect breast cancer at early stages. The percentage of women over 40 who had a mammogram within the previous two years was 69 percent in Texas compared to 76.3 percent in the United States (TFFPHT, 2005). The mortality rate for female breast cancer in Texas was 24.9 per 100,000 in 2002 for all races, but was 35.4 per 100,000 for African American women (TDSHS, 2003).

To further exacerbate the problem, Texas is also facing a future of rapidly increasing populations, which will not only increase the number of uninsured, but increase their percentage (for more details, see Chapter Two – The Uninsured in Texas). Further investments in public health will be required to deal with this "gathering storm."

Texas has the highest proportion of uninsured individuals in the United States, which has a major impact on the health and economy of the state.

In Texas, 5.6 million or 25.1 percent of the population is uninsured (U.S. Census, 2005). Compelling evidence shows that uninsured individuals postpone preventive measures and early disease treatments (IOM, 2002). They also have more chronic illnesses, which impairs their presence and performance in school and at work (see Chapter Three – Consequences of the Uninsured and Underinsured, and Chapter Nine – Education and Health). Moreover, large numbers of uninsured individuals have a negative impact on the overall health and economic vitality of the community, including a less educated and less healthy workforce. This causes increased pressure upon community services (such as emergency rooms and hospitals),

continued pressure to increase tax rates, and eroded health care services for the entire community.

In the past, hospitals were able to subsidize the cost of treating the uninsured by charging higher premiums to private insurance companies and Medicare than the actual costs of providing care. By this mechanism, insured patients were subsidizing the care of uninsured patients to keep medical institutions solvent (Families USA, 2005). Over the past 20 years, increasing pressures to reduce health care costs have essentially eliminated any growth of the subsidy. In some cases this has led to closing of emergency departments and entire hospitals. The rising tide of uninsured Texans hurts not only their health, but the health of the public, including those with health insurance, and the economic vitality of the communities in which they live.

Strategies to control the cost of health insurance or to subsidize payments by employers and employees are needed, particularly for those working for small employers.

As described in Chapter Two – The Uninsured in Texas – 79 percent of individuals in Texas without health insurance are employed, or have a family member in the workforce (TDI, 2003). Much of the uninsured population is the result of the high proportion of small employers (50 employees or less) who do not offer health insurance. For many employers and employees, the issue is cost and affordability. While there are individuals who choose to take the risk of not carrying health insurance by choice, the vast majority of the uninsured cannot afford it (TDI, 2003). Moreover, even if being uninsured was a personal choice, management of a costly illness can very rapidly deplete personal resources. Unpaid medical bills are the single most common cause of personal bankruptcies in America (The New Yorker, 2005).

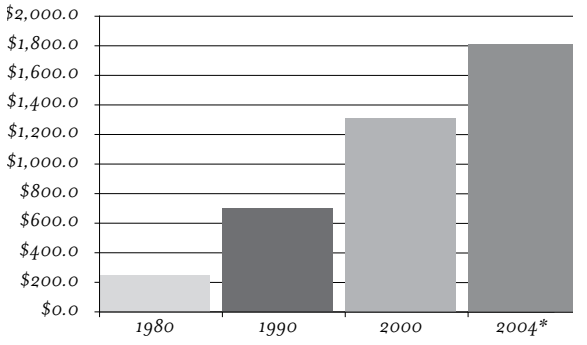
As described in Chapter Two, lack of health insurance is particularly common in specific ethnic groups in the United States, including 60 percent of the total Hispanic population and 43 percent of the African-American population for some portion of the year in a two-year study by Families USA (Stoll and Jones, 2004). Despite a common misconception, immigrants account for only 18 percent* of the costs associated with the uninsured. On average they receive $1,139 worth of health care per year compared to $2,564 for non-immigrants (Mohanty, 2005).

Current trends in the delivery of health care will exacerbate problems associated with an increasing number of uninsured Texans.

Overall health care expenditures in the United States and in Texas significantly exceed the rate of increase in the consumer price index (see Figure 1). After several years of declining or flat rates in the early 1990's associated with the development of health maintenance organizations (HMOs), health care expenditures have continued their upward trend, often with double digit increases (Levit, 2002). Figure 2 indicates that expenditures for public health are relatively small, while expenditures for physicians and hospitals are over 50 percent. An extensive discussion of efforts to control health care expenditures is beyond the scope of this report; however, population data shows Texas increasingly having an older population that consumes more health care services (for more details see Chapter Two – The Uninsured in Texas).

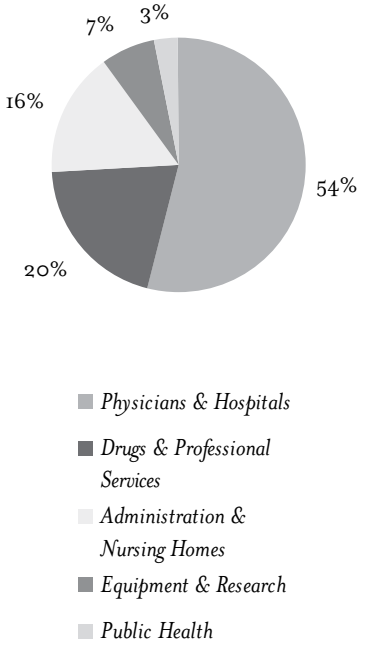
* These are uncertain estimates. Some suggest a figure up to 24% (PEW Hispanic Center, 2005).

Figure 1: National Health Expenditures (in billions of dollars)



**Projected*
Source: CMS. Homepage

Figure 2: 2002 Health Care Spending



Source: CMS, Office of the Actuary

Rising costs are further exacerbated for full-service hospitals by the emergence of free standing surgery centers and specialty hospitals (AHIP, 2006). These institutions accept very few uninsured individuals or Medicaid patients, focusing instead on very rapid and efficient care of less complicated conditions for substantial profit margins. In many cases physicians have some financial interest in the profitability of such institutions. The most complex and costly patients are then left for full-service hospitals that continue to carry the heavy financial burden of the uninsured. Congress recently extended the moratorium on the opening of new specialty hospitals, but many already exist in Texas.

Emergency rooms provide an important, but expensive and inefficient method for providing care to the uninsured and underinsured.

Twenty years ago, state and federal governments enacted laws referred to as Emergency Medical Treatment and Labor Acts (EMTALA) (Pub Law 99-272). Under these laws, emergency rooms were required to evaluate every patient who came to them for care and obligated to offer any immediately needed services (Kamoi, 2004). This would prevent "dumping" of individuals without health insurance from one hospital to another. The failure to comply with EMTALA laws produces serious penalties, consequences from state and federal authorities, and could result in protracted litigation. As a consequence, an individual without health insurance can go to an emergency room and expect to receive care without payment.

Unfortunately, EMTALA has produced a different kind of "dumping." Some physicians do not wish to provide any care to uninsured individuals and routinely refer them to the emergency room for care, thereby transferring responsibility for the patient.

Many counties in Texas do not have an emergency room and therefore create conditions in which uninsured individuals seek care elsewhere, often in large metropolitan areas. This reliance upon county-based systems of health care is itself inadequate, and unfair to parts of the state which have emergency rooms and public hospitals supported by taxpayers.

A 2002 study (Bishop & Associates) found that 32 percent of trauma patients in Texas were uninsured. Furthermore, emergency room costs for care of the uninsured have been estimated at $208 million in 2004 (TDSHS, 2005a). Because of the special importance that trauma care plays in a community, the Texas Legislature has attempted to create a funding source for trauma care based on income received from certain traffic violations. However, the resources available from this fund have been very limited. In 2003-2005, just over $2 million was available from this fund for trauma care (TDSHS, 2003). House Bill 3588 promised more funding through its Drive Responsibly Program, which would penalize habitually bad drivers and potentially generate $220 million for trauma care and emergency medical services (EMS) throughout Texas. Unfortunately, at the end of the 79th legislative session, the Legislature placed a cap on the amount available to fund trauma care at $31 million for both state fiscal years 2006 and 2007, even though the fund was projected to accrue $59 million in 2006 and $80 million in 2007. As a result of the lack of available funding, another hospital in Houston is dropping its status as a trauma center (Begley, 2005). For additional detail on EMTALA and trauma care in Texas, see Chapter Eight – Trauma Care in Texas.

Texas communities are making great efforts to improve access to health care, particularly for the uninsured.

Many efforts are under way in Texas to make ambulatory and coordinated care available to the uninsured. A complete inventory of these efforts is not feasible; however, the Task Force has had an opportunity to learn about many of these initiatives. All these initiatives are explained in more detail in Chapter Two – Uninsured in Texas.

- Carelink is a program sponsored by the Bexar County Hospital District which covers over 55,000 individuals for ambulatory and inpatient services in San Antonio in a cost-effective manner (Wilson, 2004).
- The Greater Houston Partnership Public Health Task Force is a group that studied and developed a plan to reorganize Houston and Harris County health services (GHP, 2004).
- Harris County Community Access Collaborative has a number of interesting features including peer-to-peer navigators to assist with access to care and coordination of the uninsured (Cookston, 2004; Gateway to Care, 2006).
- Project Access Dallas is an effort of the Dallas Medical Society, which involves volunteer physicians who see uninsured individuals in their practices, providing cost effective care for the uninsured (Dallas County Medical Society, 2006).
- Indigent Care Collaborative in Central Texas is a group of 15 organizations, which helps enroll eligible individuals in Medicaid and the State Children's Health Insurance Program (SCHIP) and enlists physician volunteers to Project Access. It has also produced a database, where health data on 320,000 unique patients at 34 provider sites is shared (ICC, 2006).

Expansion and strengthening of ambulatory (outpatient) services is an essential and necessary step to achieve high-quality, cost-effective care for the uninsured and those on Medicaid and SCHIP in Texas.

The current method of providing care to the uninsured in Texas is extremely inefficient, fragmented and costly. Often patients are seen at multiple emergency rooms or clinics, where tests, X-rays and other examinations are repeated. Care is episodic rather than continuing, preventive measures are not offered or received, and care is given in the most expensive of settings, in emergency rooms. To address the continuous rise in health care costs, the development of more efficient and effective delivery systems is essential.

One way to improve health care delivery in a cost effective place is through Federally Qualified Health Centers (FQHCs). FQHCs are local non-profit community health centers that provide affordable primary care and prevention services at a cost estimated to be 30 percent lower per beneficiary than other Medicaid programs (Wilhide, 2001). This is the result of decreased specialty care and fewer hospital admissions. FQHC programs include medical, dental, mental health, pharmacy, prevention, outreach and eligibility services. They also provide support services including transportation, translation, health education, disease management and home visitation.

Unfortunately only 8 to 10 percent of the uninsured population in Texas is served by FQHCs. Current plans to increase the availability of services provided by FQHCs could increase this by another 1.5 to 5 percent of the uninsured (Camacho, 2004).

The continuing rise in Medicaid and health care expenditures in Texas is unsustainable and has deleterious effects on the ability to fund other critical state needs.

Texas needs to research new options and take action to reduce the rate of increase in Medicaid spending. One option is to increase stringency in nursing home care eligibility. A second option would be to implement a comprehensive disease management program for Medicaid recipients. This has been demonstrated as a strategy to decrease the cost and improve the quality of care for chronic illnesses, such as diabetes, heart failure, high blood pressure, asthma, etc.

A third option requires the state to increase the efficiency of health care provided to Medicaid recipients and the uninsured, thereby reducing costs. This goal could be achieved by the creation of electronic health records for patients. A complete electronic health record would significantly reduce the number of redundant tests, identify medications that the patient is already receiving, avoid drug interactions, and improve both the quality and safety of care. It would require a substantial capital investment, but experiences at institutions such as Vanderbilt Medical School and Hospitals have demonstrated significant long-term cost savings.

The State of Texas has not taken full advantage of federal matching funds for health care to the uninsured.

As described extensively in Chapter Four – Medicaid and SCHIP in Texas, and Chapter Six – Reform Options Developed by Other States, there are many opportunities for federal matching funds to support the provision of health care. Serious efforts must be made to improve the cost effectiveness, efficiency and quality of health care delivery to the uninsured and to recipients of Medicaid and SCHIP in the state, which

will require additional funding. To provide additional ambulatory services; increase the number and availability of physicians, nurses and other health professionals; implement electronic health records, apply disease management and similar interventions that would improve efficiency and reduce health care costs.

There are good opportunities for leveraging and enhancing federal matches to state expenditures (for more details on the options, see Chapter Four – Medicaid and SCHIP in Texas):

- Maximize the use of demonstration and research projects for care in the state through section 1115 Waivers that authorize pilot projects in Texas (HHS, 2001).
- Submit an amendment to the SCHIP State Plan that would allow the state to expand SCHIP eligibility to unborn children who meet certain criteria, regardless of the eligibility status of the mother, including unborn children of low-income undocumented pregnant women (CMS, 2002; HHS, 2002).
- Develop a new public-private partnership model in which a health plan is developed specifically for small businesses.
- Expand coverage to uninsured individuals by taking advantage of Section 1931 and Section 1902(r)(2) of the Social Security Act (SSA), which allows states to extend Medicaid coverage to low-income parents with children (above the TANF limits) by income and asset disregards and using less restrictive income and resource methodologies when determining eligibility for Medicaid (Birnbaum, 2000).
- Take advantage of the flexibility afforded in HIFA waivers to expand to both the 1931 (optional) population and to an additional (expansion) population of non-disabled, childless adults (LBJ, 2003).

The current county-based approach to health care in Texas is inadequate and inequitable.

Care of the "medically indigent" in Texas is largely the responsibility of Texas counties. State law requires counties to make individuals with income less than 21 percent of the FPL eligible for indigent care (TDSHS, 2005b). For a family of four this is $4,200 a year. Because this covers very few of the uninsured, some counties have elected to set their eligibility at significantly higher levels (up to 200 percent of the FPL).

The main effect of the current indigent care policy is an increasing burden on hospitals in larger metropolitan areas that are forced to care for significant numbers of uninsured patients from other parts of the state, mostly due to the open door policies of emergency rooms. Testimony before the Task Force has suggested that some counties would participate in regional funding mechanisms as long as their residents were assured access to regional trauma care and emergency services. In addition, the Task Force concluded that eligibility levels for support of the medically indigent are unreasonably low and that the current system must change to either regional or state wide approaches to caring for uninsured residents.

There is a significant shortage of health care professionals in Texas, which limits the capacity to provide care, particularly to the uninsured and Medicaid recipients.

Texas has inadequate levels of physicians, nurses and other health providers. Nationally, there are approximately 220 direct care physicians per 100,000 people. Texas averages 152 per 100,000 (TSHCC, 2004). In addition, there are over 8,000 vacant nursing positions in Texas hospitals (8.6 percent of positions) (AACN,2005). These shortages have a

significant impact on access to care by the uninsured and Medicaid recipients, as well as the insured population.

Advanced practice nurses are particularly well equipped to provide primary care over a wide variety of acute and chronic illnesses. The use of nurses and other health providers in conjunction with physicians in ambulatory clinics would help reduce the cost of care. Their utilization in ambulatory care could also be significantly enhanced by collaborations between medical residency programs, FQHC's and other community clinics.

Educational attainment and health are inexorably linked in Texas.

Chapter Nine – Education and Health, provides an extensive review of the evidence that the inability to care for the health of children impedes their education. At the same time the ability to provide medical programs in the schools has both short- and long-term positive effects on health. The short-term consequences of decreased physical activity and poor nutrition contributes to the epidemic of obesity among Texas children. In addition, school districts have a financial interest in preventive measures that increase school attendance, because state funding is based on the average daily census in a school district. Absenteeism increases when asthma, diabetes and other illnesses keep children from attending school regularly.

Furthermore, there is also compelling evidence that overall health status is directly related to educational achievement. Chronic illnesses, such as heart disease and diabetes, take a greater toll on poorly educated adults than on well-educated adults (Gottfredson, 2004). In the face of rising health care costs and deteriorating health, the Task Force believes that the initiatives outlined in Chapter Nine - Education and Health, are essential for the state.

Care of people with mental illness remains a major unresolved problem for Texas.

In Texas, 3.1 million adults and 1.2 million children are at risk for developing some form of mental illness. Texas is only serving one-fourth of those currently eligible for mental health services (MHA Texas, 2005). This has many direct and indirect costs to the state. The under-funded behavioral health care system results in cost-shifting from the state to local governments. This in turn leaves those without services to potentially become the burden of local law enforcement, homeless providers, and hospital and emergency rooms. In addition, signs of trouble are found in state hospitals which are beyond capacity; local emergency facilities on diversion; a high percentage of people with serious mental illness in juvenile and adult correction facilities; suicide as the leading cause of death for youth; absenteeism and presenteeism from untreated mental illness in the workplace; and high disability rates from mental illness (for more details see Chapter Three – Consequences of the Uninsured and Underinsured).

Widespread denial of behavioral health care needs, whether from stigma or from public policy, comes at a price. When behavioral health issues go untreated, the result is a disproportionately high cost of other health care claims. Recent research demonstrates the link, for instance, between untreated depression and other health conditions such as headaches, back problems and even heart disease (NIMH, 2000). Neglect of behavioral health care is a major underlying contributor to high health care costs,

which in turn is the major cause of employers' inability to provide health insurance (TDI, 2003).

The solution to adequate access to health care for the uninsured and underinsured is a shared responsibility where partnerships are crucial.

Shared responsibility includes empowering patients to play an active role in access and treatment decisions and to engage in non-traditional delivery methods that result in cost effective programs. For patients to accept such responsibilities, health care providers must partner with patients to ensure they understand their disease process, know their treatment plan, and comprehend what is expected of them to improve their health.

In addition, sharing responsibility requires the building of partnerships and coalitions where the American health care system has traditionally been fractured. Federal, state and local governments can improve their contributions to solve the health care crisis by partnering to reduce redundancy, barriers and costs, working collaboratively and across lines of authority to ensure needs are met. Legal, insurance, regulatory, accrediting and health care entities must partner to remove regulatory, payment and legal barriers to prevent further inefficiencies and lack of coordination in our health care delivery system. Health care providers must partner with each other to expand their capacity to provide care. This will require education and training programs to cross traditional boundaries and integrate education programs, faculty and resources to reduce the health care shortage.

As a whole, partnering will require taking each others' needs into account as we redesign our health care delivery system. We have implemented regulations, payment methods and delivery systems in isolation. As a result, the entire continuum responsible for the provision of health care from the federal government to the patient is broken. Providers, patients and policy makers must review and revise the current health care financing and delivery systems to improve access to care for all people living in Texas.

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[Chapter Eleven]

Recommendations

After studying evidence presented and reviewed, the Task Force concluded that Texas faces an impending crisis regarding the health of its population, which will profoundly affect the state's competitive economic position nationally and globally. It believes that vigorous and bold efforts will be required to avoid the "perfect storm." Based upon the findings reached in Chapter 10, the Task Force makes a series of recommendations, several of which will be controversial, but reflect the urgency of taking difficult measures to protect against the impending storm. Any long-term solution to the health care challenge will depend critically upon national policies; however, this Task Force is focused upon the situation in Texas.

The Task Force concluded, after an assessment of health care access and needs for the uninsured in Texas, that the current fragmented county-based health care system for the provision of indigent care is extremely inadequate, inefficient and will continue to grow more inadequate over the next several years. A rational solution to this conundrum would be a state-wide system for indigent care established and provided by state government. While the Task Force recognized that the creation of such a system of health care is extremely challenging, significant reform must be part of the long-term solution to the problem of access to care. The Task Force asserts that these recommendations include an important set of steps toward this result.

These recommendations are also predicated on the assumption that solutions to the critical condition of the Texas health care system are a shared responsibility of patients, providers, community organizations, religious organizations, policy makers, governmental entities and the business community. Each has a vital role to play. Community participation is particularly essential in disadvantaged and underserved communities. Moreover, these recommendations are based on the need for maintenance of health care for all of our citizens, such as emergency and trauma care. An important underlying theme is the need for a substantial shift from a hospital/emergency room paradigm for care of the uninsured, to an outpatient ambulatory mode of care. The Task Force particularly notes that in the absence of obvious perfect solutions, there is a need for continuous creative experimentation to find better ways to provide care in Texas.

Seeking a solution

Recommendation 1:

Texas should adopt a principle that all individuals living in Texas should have access to adequate levels of health care.

Findings:

- 5.6 million non-elderly individuals living in Texas, or 25.1 percent of the population, were without health insurance in 2004 (U.S. Census Bureau, 2005).

- The uninsured have poorer health and increased mortality (see Chapter Three – Consequences of the Uninsured and Underinsured for more details).

- Universal access to health care is an essential and necessary component in a successful society.

- Adopting the policy of universal access will result in a better skilled and more productive workforce, strengthen the Texas economy, and reduce long-term health costs.

- Health care should be consistent with the recommendations of the Institute of Medicine of the National Academies, i.e. care that is effective, efficient, safe, timely, patient-centered, and equitable (IOM, 2004).

A successful health care system for Texas must create the conditions which meet the six aims as described by the IOM (IOM, 2004). This does not exclude variations in health care benefit packages, or some limitation on the choice of drugs and procedures, but it does imply that services are to be provided "based on scientific knowledge to all who could benefit and refraining from providing services to those not likely to benefit" (IOM, 2004). In an environment of rapidly rising health care costs, services should be provided that offer high-quality care in the most cost effective manner possible. Accomplishing these goals requires an adequate number of health care providers, efficient and effective health care delivery systems, and adequate financial resources. Preventive programs, especially those for schools, are essential for success.

The Task Force is aware that a significant number of individuals living in Texas are not legal immigrants. The control or regulation of illegal immigration is not in the charge to the Task Force; however, it believes that the overall health of the state depends on the development of methods to provide effective and cost efficient health care to all individuals living in Texas. Disease has no boundaries, nor should health care. The health status of illegal immigrants in Texas impacts the health status of all Texans.

Funding

Recommendation 2:

Texas should provide more adequate resources and aggressively seek more efficient and effective methods to support health care to the indigent and uninsured with the goal of reducing rising health care costs.

The Task Force recognizes the significant fiscal constraints upon the state of Texas and the growing financial burdens created by rapidly rising Medicaid costs and other demands on the state budget. However, it is convinced that additional investment is required to make the health care system more effective and efficient. Under the current system, care for the uninsured is borne by society through a variety of cross subsidies, public venues and philanthropy. These costs are certain to grow unless systematic efforts are made to control the rate of increase. Health professionals and providers must also contribute to controlling these rising costs. Academic health institutions should be charged to aggressively conduct health services research on the control of health care costs and other characteristics of a high quality and efficient health care system (see Recommendation 9). While some increased investment from general funds of state and local government will be required, the Task Force believes that substantial additional resources can be obtained by better leveraging state monies in a manner that maximizes return from the federal government.

Recommendation 2.1:

Texas should authorize and encourage efforts to move indigent health care from a county-based model to a model based on regional multi-county health districts, while increasing the state-wide federal poverty level (FPL) to 100 percent from 21 percent for indigent care responsibility in Texas counties.

Findings:

- Indigency in Texas is currently defined as those living at 21 percent FPL or less for determining county responsibility for providing indigent health care. Twenty-one percent FPL is less than $1,700 a year for a single adult (TDSHS, 2005).

- Texas requires counties to create county indigent health care programs (CIHCP), using 8 percent of their general revenue tax levy to provide indigent health care in order to receive state funds (Canton, 2000).

- Large metropolitan counties such as Harris (Houston), Dallas, Tarrant (Fort Worth), and Bexar (San Antonio) are using more than 8 percent of their ad valorem tax levy and providing health care to individuals at levels above 21 percent FPL (Cookston, 2004; Dallas County Medical Society, 2006; Wilson, et al., 2005), while others choose to spend far less than 8 percent.

While counties such as Bexar, Harris, Dallas and Tarrant exceed the state requirements for the delivery of indigent health care, other neighboring counties choose to provide minimal levels, including only serving those at 21 percent FPL (Cookston, 2004; Dallas County Medical Society, 2006; Wilson, et al., 2005). This creates an inequitable and inefficient system where the uninsured migrate from their home counties to larger counties to seek medical care, often in already overcrowded emergency rooms where they are subsidized by the taxpayers of the larger county.

Current county policies that limit support to those persons living at 21 percent FPL or less, provide inadequate support for indigent health care to residents of their counties. The burden of funding indigent health care is now increasingly shifted to taxpayers in large metropolitan counties where patients, often from surrounding counties, come for care. This is an unfair subsidy which jeopardizes the care for all who seek it in these metropolitan areas.

Authorization is needed to promote change from a system of county-based indigent care to a regional-based system of indigent care, where appropriate. This would ensure necessary care for all populations, regardless of their county of residence, with more equitable financing. Regionalization would concentrate limited or expensive health services locally within an area, while dispersing primary care and less complex services broadly through each region. To be successful, any regional plan must recognize the great diversities among Texas counties and regions by allowing broad and flexible principles to be tailored to a region's specific needs, rather than a rigid uniform policy.

In addition, a minimum 8 percent of general revenue tax levy (GRTL) on county expenditures should be mandated for indigent health care services. Funding could be established through Medicaid 1115 or HIFA waivers on a region-by-region basis to encourage new and comprehensive state approaches that decrease the number of uninsured individuals, as described below.

Recommendation 2.2:

Texas should redouble its efforts to aggressively pursue Medicaid and other federal reimbursement programs for which a state investment will result in substantial federal matching and supplementary reimbursements.

Findings:

- The state currently has no Medicaid 1115 Waiver for research and demonstration projects and has made limited use of other types of waivers or expansion options.

- Texas taxpayers are subsidizing other states such as California and New York, that aggressively pursue federal matching and receive a substantially greater share of federal funds than Texas.

As outlined in Chapter Four – Medicaid and SCHIP in Texas, Texas has not taken full advantage of federal matching programs to fund and provide care for the uninsured. The Task Force concludes that maximizing such federal support is essential to expand coverage and improve reimbursement to health care providers for care of the uninsured, but equally important to introduce methods that will increase the efficiency and cost effectiveness of care. Texas has remarkably disadvantaged itself in comparison to the amount of federal monies flowing to other states to provide health care. This is a specific problem when enrollments in programs such as SCHIP are not maximized, resulting in a pattern of underutilization and a loss of federal funds.

State leadership should consider covering parents under the poverty level, reinstatement of the medically needy program including a reinstatement of the medical spend-down to eligibility provision, and possibly experimenting with limited expansion to the poor population that does not live with dependent children. Texas has failed to take full advantage of federal matching funds for Medicaid.

Current levels of Medicaid coverage and reimbursement mean that, in addition to very high local property taxes to support indigent health care, virtually all of the disproportionate share (DSH) funds are devoted to only partially reimbursing shortfalls of caring for the uninsured and underinsured at hospitals (THHSC, 2004; HSCSHCE, 2004). These low levels of coverage have reduced additional federal funds through Medicare dispro and FQHCs and meant that disproportionate share funds are not available for innovative coverage initiatives as they are in other states.

Recommendation 2.3:

The state should develop and adopt tax policies and initiatives that encourage and enable employers (especially small employers) to provide health insurance to their employees.

Recommendation 2.4:

State and local governments should give preferential treatment to contractors and subcontractors who offer health care coverage for their employees. Those seeking funding through the Texas Enterprise Fund and similar public programs should be included in this requirement.

Findings:

- Seventy-nine percent of uninsured adults in Texas are employed or in families in which a member is employed (TDI, 2003).

- Workers in construction, manufacturing, and wholesale and retail trade account for 53 percent of all uninsured individuals in Texas (TDI, 2003).

Texas spends a considerable amount of tax dollars with contractors who build roads and other major public facilities in the state. Many of these businesses do not currently offer insurance coverage to their employees (TDI, 2003). If the state would require all contractors and subcontractors to state and local governments to provide reasonable employer sponsored insurance, especially in the construction industry, there would be a significant decrease in the uninsured population in the state. Furthermore, as business tax structures are modified by the legislature, attention should be given to a tax credit for small employers who provide health insurance to their employees.

The preferential treatment for contracts could occur in the course of scoring or by financial addition to the contract. The health insurance coverage should be available to all employees in their workforce. Eligibility of special programs such as the Texas Enterprise Fund should also include this provision. Of course, additional consideration should be given to small employers and programs that facilitate and encourage them to offer health insurance to their employees (see Recommendation 4.1).

Recommendation 2.5:
Texas Leadership should actively work with federal officials to maximize opportunities for initiatives and new policies expressly intended to provide for the most efficient delivery of health care services to broader numbers of uninsured individuals living in Texas.

A succession of federal statutes adopted over many years, intended to provide greater flexibility to states to administer Medicaid programs, have instead produced federal micromanagement of program administration and has resulted in less state opportunities or willingness to pursue innovative approaches to access, financing and delivery of health care services.

The Task Force urges Texas to adopt the best of sweeping advances in medicine, health care delivery and systems technology, as the Medicaid population and surging health care costs challenge the state's ability to provide critically needed services. Texas policy makers at all levels of government should work toward new commitments from Washington that allow the State to modernize its Medicaid program. However, the Task Force does not believe block grant funding for Medicaid is a safe and effective way to provide federal support in Texas.

Quality Assurance Fee

Recommendation 3:
*A Quality Assurance Fee (called a provider tax in some states) of 3 percent should be assessed on revenues of all hospitals and free standing surgery centers in order to obtain a federal match to enhance overall finances for provider reimbursement and enhancement of the quality and efficiency of health care to the uninsured.**

Findings:

- A 3 percent fee on revenues of all hospitals and surgery centers is likely to produce about $1.1 billion in state general revenue (Warner, 2006).

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* One dissenting opinion on this recommendation, Mr. Richard Johnson. (See Appendix K)

- The federal match provides over $1.50 for each state dollar (TDSHS, 2004a).

- A quality assurance fee on these entities could bring the state in the range of $1.7 billion additional dollars annually from the federal government (Warner, 2006).

- Thirty-five other states have some form of a quality assurance fee or provider tax and many have multiple such taxes (Smith, et al., 2005).

There are a number of challenges facing the health care system in Texas:

- Texas has the highest percentage of uninsured in the country (U.S. Census Bureau, 2005).

- Medicaid is limited in numbers covered and provider reimbursement (see Chapter Four – Medicaid and SCHIP in Texas for more details).

- EMTALA and the Texas Constitution make hospitals and counties responsible for some of the uninsured (for more details see Chapter Eight – Trauma Care in Texas).

- The Legislature is confronting challenges to reduce local property taxes and increase education spending.

- Urban taxpayers are at their limit in providing additional property taxes to support indigent care, and public and community hospitals that care for Medicaid recipients and the uninsured have exhausted all the DSH funds and much of their upper payment limits (UPL), and are limiting services that are not mandated (for more details on DSH and UPL see Chapter Four – Medicaid and SCHIP in Texas).

Many states have implemented quality assurance fees (Smith et al., 2005). A fee is attractive to policy makers, because, if devoted to expanding Medicaid, it is one of the few taxes which has the capacity to substantially increase funding to the sector being taxed. The use of provider taxes and assessments has been increasing broadly in other states. A number of states have increased their reliance on this form of financing and in FY2005, a total of 35 states had one or more provider taxes in place (see Table I for a summary of state provider taxes). Texas currently imposes a quality assessment fee on intermediate care facilities for the mental retarded (ICF/MR) facilities and taxes Medicaid health management organizations (HMOs). By law these fees must apply to an entire class of institutions, e.g. all hospitals or all nursing homes.

The net impact of a quality assurance fee on a particular provider depends not only on the type amount of the fee, but how the proceeds of the fee are used. In Texas, a 3 percent fee on all hospitals and free standing surgery centers would yield more than $1.1 billion in direct state general revenue, which could mean the possibility of drawing down an additional $1.7 billion in federal matching money if used for Medicaid (Warner, 2006). Some of the tax receipts could be used to replace local property tax dollars, although to do so would diminish the net increase in funds.

The Task Force proposes to use the proceeds from a quality assurance fee to maximize the drawdown of federal funds. This would give Texas the capacity to enhance efficiencies in the overall provision of care to Medicaid recipients and the uninsured. Hospitals which provide unsponsored charity care (not bad debt, uncovered services, services lacking medical necessity, deductibles, co-pays, Medicaid, SCHIP,

Table I – State Provider Taxes and Assessments in FY2005 and FY2006

Provider Type	*Prior to 2005*	*New in 2005*	*New in 2006*	*Total in 2006*
Nursing Home	*23*	*5*	*4*	*32*
ICF/MR	*12*	*5*	*2*	*19*
Hospital	*12*	*2*	*2*	*17*
Managed Care Organization	*6*	*3*	*6*	*15*
Pharmacy	*3*	*0*	*1*	*4*
Home Health	*2*	*0*	*0*	*2*
Practitioner	*2*	*0*	*0*	*2*
Other	*1*	*2*	*1*	*4*

Source: Vernon Smith, Kathleen Gifford, Eileen Ellis, Amy Wiles, Robin Rudowithz, and Molly O'Malley, "Medicaid Budgets, Spending and Policy Initiatives in State Fiscal Years 2005 and 2006: Results from a 50 State Survey," Kaiser Commission on Medicaid and the Uninsured, October 2005, p. 38

or any other care coverage that does not completely cover costs) might receive a partial tax credit against the 3 percent gross receipts tax; although, any tax credits for taking care of the uninsured would substantially reduce the yield of such a fee.

The Task Force mission is to identify sources of funds to increase care to the indigent and uninsured, as well as encourage a broader range of participation in indigent care. We hope a quality assurance fee will decrease adverse risk selection and increase incentives to provide uncompensated charity care and enroll in Medicaid. The goal is to increase health care coverage and make cost-shifting more transparent.

State Experimentation

Recommendation 4:

The state should significantly increase its capacity and commitment to conduct experiments in health care delivery and funding.

Findings:

- Texas has not taken adequate advantage of opportunities to obtain federal waivers in order to experiment with better ways to provide health care (see Chapter Four - Medicaid and SCHIP in Texas)

- The state currently has no 1115 Waiver for research and demonstration projects and has made limited use of other types of waivers.

Resolution of the problem of access to health care is extremely complex. The family planning waiver for Medicaid offers real opportunities for enhanced resources in the care of women. The three-share approach discussed in Recommendation 4.1, or some variant of it could be useful to employed individuals working for small employers. There are other categories of individuals such as students, recent high school or college graduates, those who are disabled and/or completely unemployed, and those who are in and out of the workforce, for whom specific programs might be designed.

Since many of these approaches have unintended consequences and the interactions are so complex, the key is to experiment– to provide opportunities for varying ways to leverage resources and to maximize efficiency and cost effectiveness while preserving quality of care. Providing incentives for prevention rather than treatment, and making the ambulatory setting the center for medical care rather than emergency rooms and hospitals, are among important areas that can be explored.

The state must take proactive approaches to these kinds of experiments. While the Centers for Medicare and Medicaid Services (CMS) generally require that waivered programs be revenue-neutral, there is considerable latitude in how and which revenue is applied, and what outcomes can be achieved (HHS, 2001). It should be noted that if Medicaid expansion reduced the need for all disproportionate funds to go to the neediest hospitals that those funds can be employed in initiatives without any additional federal approval.

One example of experimentation involves Mexican nationals living in Texas. Many are not receiving preventive health care, have limited access to health services for acute episodes, and have difficulties controlling chronic health problems. Mexican nationals living in Texas frequently use emergency departments as their last recourse or return to Mexico to receive the health care they need. As a result, the health status of the Mexican population in Texas is sub-optimal and negatively affects the well-being and economy of both countries. The Mexican Consulates have discovered that recent immigrants feel comfortable seeking services and advice from the Consulates. Enhancing the services offered at the Mexican Consulate to include primary health care is a significant change that would be welcomed by Texas-based Mexican nationals. More detailed information on this proposal is provided in Appendix H of the report.

Recommendation 4.1:
Experimentation with employer premium subsidies should be undertaken with the use of Disproportionate Share monies, Medicaid funds and other federal programs.

Findings:

- In Texas, 73 percent of all businesses are small employers (less than 50 employees) (TDI, 2003).
- Only 37 percent of small employers in Texas offer health insurance (TDI, 2003).
- Of the small employers who offer insurance, only 35 percent of their employees enroll compared to 63 percent of employees from large employers (TDI, 2003).

A significant contributor to the high percentage of uninsured individuals in Texas is the proportion of small employers providing health insurance in comparison to other states (described further in Chapter Two – Uninsured in Texas). Small employers have the greatest difficulty in obtaining health insurance for their employees at a cost that businesses and/or employees can afford. There is desperate need for experimentation within the state to find ways to help small employers obtain such affordable health insurance (TDI, 2003).

Many experiments have been undertaken to create opportunities for small employers to purchase insurance for their employees, usually through some kind of purchasing pool. While there is room for

further experimentation in this area, purchasing pools have been negatively impacted by adverse selection, i.e. employers with employees who have significant health problems preferentially enroll in such pools while employers who have very healthy populations are unwilling to participate. In order to overcome this adverse selection, one approach would be to add small business employees to the public employer pool. This would place them in a larger group with more choices and better rates.

Another particularly interesting approach to increasing small employer coverage is the so-called three-share approach. The basic benefit package is provided to employees with relatively low premiums, which are divided equally among employer, employee and a state subsidy. While recent federal law prohibits the use by the state of unused SCHIP monies to investigate the feasibility of this unique model for promoting insurance coverage, its goal is compelling. Such pilot programs are not only worthwhile, they are urgently required.

Recommendation 4.2:
Health care providers must work to improve the quality and efficiency of care provided to the uninsured and underinsured and, in collaboration with community partners, to assist patients so that they can better navigate the health care system.

Findings:

- SETON Healthcare System found that using a telephone call center staffed by nurses redirected 62 percent of callers intending to use the emergency departments (Seton, 2005).

- The "Urgent Matters" project, sponsored by the Robert Wood Johnson Foundation, demonstrated that patient visits in the emergency room could be reduced by over 40 percent with more effective organization (Wilson and Nguyen, 2004).

- Diversion time (i.e. periods where the emergency room does not accept patients) by hospitals could also be decreased by 40 percent by this more effective organization (Wilson and Nguyen, 2004).

- Increasing efficiency decreased the number of patients who left the emergency room without being seen from 21 percent to 7 percent (Wilson and Nguyen, 2004).

Sick uninsured individuals often see emergency rooms as an important source of primary care provided by excellent physicians, with the best equipment, and all the resources required for treatment (see Chapter Eight – Trauma Care in Texas). At the same time they dread long waits and variable degrees of courtesy and inefficiency in their care. For this reason they often delay care (described in Chapter Three – Consequences of the Uninsured and Underinsured). Focus groups conducted with a wide variety of uninsured individuals are almost all aware of the availability of emergency rooms, but not of other community health services (Rosenbaum, 2005). "Active engagement" of hospitals and medical schools with community health sites and better community education regarding the availability of services could significantly reduce the pressure on emergency rooms (Rosenbaum, 2005). While the increasing number of patients using the emergency room has placed enormous pressure upon them, it has also been clear that internal organizational elements such as surgical schedules, management of intensive care unit capacity

and other determinants of hospital patient flow are essential to the solution of this overcrowding.

Brackenridge Hospital in Austin and The University of Texas Medical Branch at Galveston found that emergency room utilization, which is expensive and inefficient, can be dramatically reduced by effective programs of telephone and emergency room triage. This is facilitated by identifying high emergency room users and instructing them on how to get advice by telephone. It is also helpful to use this information at the time the patient reaches the emergency room.

Public service announcements, bilingual posters, wallet cards, and other outreach activities should be conducted to communicate that emergency rooms are not appropriate for routine health care. Use of Federally Qualified Health Centers (FQHCs) and other community health centers should be actively promoted as affordable alternatives to emergency rooms (see Recommendation 7.5).

Full implementation of both the assessment and disbursement aspects of the Driver Responsibility Program along with further strengthening of the regional strategic planning and monitoring infrastructure of the Regional Advisory Councils and/or other regional planning bodies would substantially strengthen emergency care in Texas.

Recommendation 4.3:

State and federal laws on emergency medical treatment and active labor act (EMTALA) as well as their interpretation by CMS, should be clarified so that individuals who are non-emergent in emergency rooms may be more quickly referred to ambulatory sites if access to the ambulatory site is assured.

Findings:

- Primary care-related visits constitute between 42 to 56 percent of the visits in major Texas hospitals (Parkland, Ben Taub, Memorial Hermann, and Brackenridge were polled) (Bishop & Associates, 2002).

- The uninsured constitute 23 to 48 percent of the primary care-related visits in these hospitals (Bishop & Associates, 2002).

EMTALA, often referred to as the 'anti-dumping law', created the requirement for medical screening and stabilization of patients with emergencies (described in detail in Chapter Eight – Trauma Care in Texas). Over the 20 years since it was passed, EMTALA has led emergency rooms to become a part of a community's safety-net of health care providers, because hospitals have the only legally mandated 'open door' policy. The reliance on hospital emergency rooms for basic care contributes to emergency room overcrowding problems. Treating patients with non-urgent health issues in an ambulatory clinic would alleviate emergency room overcrowding, and improve trauma care. This will provide better delivery and care for both non-emergency and emergency patients.

Full implementation of both the assessment and disbursement aspects of the Driver Responsibility Program along with further strengthening of the regional strategic planning and monitoring infrastructure of the Regional Advisory Councils and/or other regional planning bodies would substantially strengthen emergency care in Texas.

Virtual Care Coordination Model for the Uninsured

Recommendation 5:
The concept of virtual care coordination for the uninsured (including these patients in a structured system of care) should be developed by local communities and by the Texas Health and Human Services Commission.

A virtual health care coordination model would be valuable not only for those without health insurance, but for all patients to have an easy identifier allowing health care providers quick access to medical records. For this model to be effective, a system of community-based ambulatory care sites would be required across the state. These ambulatory care sites would include federally qualified health centers (FQHCs), hospital outpatient clinics, hospital-supported community ambulatory centers, and clinics supported by community organizations such as churches, non-profits and community centers. At the site of first health care contact, whether inpatient or ambulatory, each patient should be assigned an electronic health record with a unique patient identifier. Such records should be accessible by secure internet-based technology so that the record can be retrieved wherever the patient is seen.

To be most effective, methods that improve quality of care such as disease management of patients with diabetes, asthma, high blood pressure and lung disease should be utilized. Patients in the virtual care coordination system would be enrolled in programs designed to improve their health management, increase their function and minimize their need for hospitalization. Once patients have been identified, it would be feasible to provide reminders about immunization status and other preventative measures that can be implemented at the time of their next contact with the health system.

In conjunction with virtual care coordination should be the development of high quality electronic health records (EHR) that can use provider time more efficiently than paper records, decrease redundant evaluations, tests, X-rays, and other procedures and provide information to multiple providers. In spite of initial capital expenses, the EHR is increasingly becoming part of health care in Texas. For uninsured patients who often go to several emergency rooms, multiple clinics, or other providers, the EHR can decrease costs of care.

Disease Management

Recommendation 6:
Health care institutions and other providers must contribute to increasing community based ambulatory care, which includes integrating the latest developments in disease management and other cost effective models of health care delivery that seek to improve the quality of patient care while decreasing the cost of care.

Findings:

- Ten percent of patients account for 80 percent of health care expenses (Longley, 2004).

- Individuals with chronic illnesses such as diabetes, heart failure, chronic lung disease, asthma and hypertension make frequent visits to the emergency room and often require hospitalization.

Ambulatory (outpatient) care has an increasingly important role in patient care. Properly developed and integrated disease management programs,

involving nursing, specialists and primary care providers, can significantly reduce emergency room visits, hospitalizations and re-hospitalizations, and improve quality of life for patients with debilitating chronic conditions such as diabetes and congestive heart failure. Various disease management methodologies, the focus of a major Medicare demonstration initiative undertaken by the U.S. Department of Health and Human Services in 10 regions around the country in 2004, rely principally on the role of multidisciplinary teams in which non-physicians play an extremely important role. These various team models can include 24-7 access to nurses for the monitoring of patient condition and care coordination, improved patient education and awareness of the disease and condition, pharmacists who facilitate better use of medications, nutritionists who facilitate proper diets, as well as the principal physician for the patient, who is in charge of the overall care and condition of the patient.

Creating effective disease management programs at community sites, including FQHCs and other clinics, would be a central feature in improving the quality of care and reducing health care expenditures. All disease management programs should explicitly commit to published standards of quality of care, e.g. American Heart Associate criteria for management of heart failure, or Diabetes Association standards for care of diabetic patients.

Recommendation 6.1:

Behavioral health care (both mental health and substance abuse) services should be accessible to all Texans with mental illness and additional public funding should be appropriated.

Findings:

- 3.1 million adults and 1.2 million children in Texas have a diagnosable mental illness; of which 1.5 million have an illness that impaired their ability to function (MHA Texas, 2005).

- At least 55 percent of individuals living in Texas are uninsured or underinsured for behavioral health care; thereby forcing their dependence on a significantly underfunded public system (MHA Texas, 2005).

- The total economic cost of mental illness in Texas was $16.6 billion, including $13.3 billion in lost income due to reduced workforce participation, $2.6 billion for mortality costs and more than $700 million for lost income due to family care giving (MHA Texas, 2005).

Current behavioral health care eligibility requirements leave many individuals living in Texas without access to appropriate care (see Chapter Two – Uninsured in Texas – for more details). The overall consequences of untreated mental illness manifest themselves in poor school performance, juvenile/criminal justice involvement, unemployment, homelessness and suicide (MHA Texas, 2005). Only when public mental health is more accessible, committed and effective will patients receive beneficial treatments. Furthermore, behavioral health care services must be based upon medical advances that allow for the greatest chance of recovery; such services usually include medication, appropriate housing and case management. These should include efficient referral for diagnostic and diversion programs to deal with substance abuse, for example, in community treatment programs.

The Task Force endorses and recommends that Texas acknowledge and follow the six goals outlined by President Bush's New Freedom Commission on Mental Health (2003):

- *Americans understand that mental health is essential to overall health.*
- *Mental health care is consumer and family driven.*
- *Disparities in mental health are eliminated.*
- *Early mental health screening, assessment and referral to services are common practice.*
- *Excellent mental health is delivered and research is accelerated.*
- *Technology is used to access mental health care and information.*

In addition, the Task Force believes that public funding should increase. An increase in state funding would result in less cost-shifting to local governments; reduction in the jail and prison populations of people with behavioral health problems as well as reduction in the number of homeless individuals and the overcrowding of emergency rooms. Furthermore, the Task Force believes that mental health coverage should be a part of any health care package, with the same benefits as physical illnesses.

Health care Providers

Recommendation 7:

Texas must increase investment in the education and training of health professionals who will provide significant amounts of care to the uninsured and underinsured.

Doctors

Recommendation 7.1:

Texas should increase the number of physicians annually graduating from its medical schools by 20 percent over the next decade with special emphasis upon creating a workforce representative of the state population.

Findings:

- Texas has an inadequate number of physicians who are disproportionately located in large metropolitan areas.

- Nationally, there are approximately 220 direct care physicians per 100,000 people. Texas averages 152 per 100,000 (TSHCC, 2004).

The Association of American Medical Colleges (AAMC) and American Medical Association (AMA) have recommended that the number of physicians educated in our country's medical schools be increased by 15 percent (AAMC, 2005). Some experts recommend an increase of 30 percent. The need for physicians in Texas is substantially greater than the AAMC and AMA recommendation, in view of the current shortfall and the much greater rate of population growth anticipated in Texas than the national average.

Our health care systems, structural processes of care and health policies are, in large part, shaped by the leaders who design them. Furthermore, our health- care system's success hinges on the workforce that carries out these policies and procedures. From this organizational standpoint, one factor that can affect both the availability and acceptability of health care for Latino Americans is the degree

to which the nation's health care professionals and leadership reflect the racial and ethnic composition of the general population (Pagan, 2006). The same argument should be made for representation by African Americans, Asians and other ethnic and racial groups. Additionally there is evidence that physicians for a particular ethnic group care for a disproportionate number of uninsured patients from their ethnic heritage.

Recommendation 7.2:

Texas should expand medical school loan repayment programs for graduates of Texas medical schools working in Texas to include up to 500 physicians per year. One-third of student debt up to $35,000 per year should be forgiven for each year of service in a public hospital or in a clinic in which the patient population equals or exceeds 50 percent Medicaid and uninsured patients.

Findings:

- The average medical school debt is over $100,000 for a public medical school (AMA, 2006).

- The number of physicians, who see uninsured patients or patients covered by Medicaid, has declined in the past 15 years (TMA).

Increased opportunities to educate physicians should be coupled with the need to provide care for underserved populations in both urban and rural communities. The average medical school debt is a major barrier for students from underserved communities and ethnic groups to aspire to obtain a medical degree. Substantial expansion of the medical school tuition loan repayment program should be undertaken for graduates who provide care in public institutions or who work in institutions whose patient population includes more than 50 percent Medicaid and uninsured patients. Such loan repayment program would be available at the completion of residency training. This program should include non-primary care shortage specialties as well as primary care providers. Whenever possible this should be structured to maximize the match with the National Health Service Corps Loan Repayment Program. Participants in this program must agree to accept Medicare, Medicaid and patients on an ability to pay basis.

Recommendation 7.3:

State support of medical residency programs should allow an increase in residency positions by 600 per biennium for the next decade. Since the average residency is four years in duration, this would increase the number of physicians graduating from residency programs by 750 per year or by 50 percent annually in 2017.

Findings:

- The total number of residency positions in Texas is substantially below other states (Texas 5,900; California 9,500; New York 14,000) (ACGME, 2004).

- For a graduate of a Texas medical school who obtains a residency within the state, the probability is 85 percent that the physician will practice in Texas (AMA, 1999).

- Approximately 45 percent of graduates of Texas medical schools obtain residencies outside of this state (Shine, 2004).

- In a 2004 survey, approximately 135 graduates who went out of state for residency training indicated a desire to remain in the state if a quality residency had been available to them (TMA).

A very cost effective way to increase the physician supply in Texas and to improve access to medical care is the expansion of medical residency programs. Not only is the cost of education for residents substantially lower than that for educating a medical student, but a high proportion of residents enter into practice in the community where they train. Experience in east, south, and west Texas emphasizes that physicians who complete their residencies in underserved parts of the state have a high likelihood of remaining and entering practice in those areas.

Restoration of Medicaid funding of graduate medical education is essential to hospitals caring for large numbers of uninsured patients, and would benefit from increased federal matching funds resulting from the Quality Assurance Fee.

The 79th Texas Legislature issued a joint resolution urging that CMS raise or eliminate the cap in the total number of residents receiving federal graduate medical education support (HB 2420). Success in that regard would allow for the expansion of residency programs with federal support. Expansion of programs with state support would have an additional advantage in that residents could spend a greater proportion of their time at ambulatory sites providing care to Medicaid and uninsured patients in programs designed to reduce re-hospitalization and the use of emergency rooms. The funds should be for exclusive use by residency programs.

Nurses

Recommendation 7.4:

Texas should increase funding to support 2,000 more undergraduate nursing students, approximately 50 percent of the eligible applicants who have been denied admission, and 200 faculty members necessary to train them. An estimated $25 million per biennium in state General Revenue would need to be added to the funding formulas to reflect the increase in nursing student enrollment, and an additional $30 million in additional General Revenue would be needed to cover the balance of costs related to the additional faculty members.

Findings:

- There are over 8,000 vacant nursing positions in Texas hospitals (8.6 percent of positions) (TDSHS, 2004).

- By 2010, it is estimated that Texas will have a shortage of more than 52,000 full time equivalent (FTE) registered nurses (RNs) (HRSA, 2002).

- Texas would require an additional 39,000 nurses to achieve the national average in per capita nurses (TDSHS, 2004).

- In 2004, approximately 4,200 applicants could not be accommodated in Texas schools of nursing because of inadequate numbers of faculty (THECB, 2004).

Not only is the nursing shortage in Texas increasingly challenging for hospitals, but it also limits the number of nurses available for advanced practice nursing, including the provision of primary care and the effective application of team health care. Available research demonstrates that hospital mortality is significantly reduced when hospital

nursing staff has higher levels of nursing education and training.

Interest in baccalaureate and graduate nursing education programs is high, but not all qualified applications are being accepted, due to a lack of capacity. In fact, the American Association of Colleges of Nursing (AACN) found that more than 32,000 qualified applicants were not accepted at schools of nursing last year due primarily to a shortage of faculty and resource constraints (AACN, 2005). Furthermore, in Texas, nursing faculty salaries are not competitive with those in other parts of the country, or with private practice opportunities, so recruitment and retention of outstanding faculty members is limited.

In addition, Texas has a substantial shortage of pharmacists, dentists, and allied health providers. These individuals are vital for an effective health care team. Careful analysis of the needs for these health professionals is required and efforts to expand the work force in these areas should be undertaken.

Federally Qualified Health Centers

Recommendation 7.5:

The state should continue to provide resources to assist community health centers to qualify for federal support and modify reimbursement methodologies to reflect multidisciplinary team care. Hospitals, medical schools, nursing schools and other health care provider organizations should work closely with community groups to provide adequate staffing for federally qualified health centers, with an emphasis on cost-effective programs, including disease management programs and community public health programs.

Findings:

- FQHCs are community based sites for providing ambulatory care.

- If the site meets federal standards for the services provided and the required amount of community support, it qualifies for federal funding.

- Texas currently has 37 FQHCs or 1.62 centers per 1 million people compared to 2.51 centers per one million people in Illinois, 2.18 centers per 1 million people in New York State, and 1.97 centers per million people in California (U.S. Census Bureau, 2005b; HRSA).

FQHCs provide some of the best examples of integrated ambulatory care available. In spite of the recent authorization for additional FQHCs in the state, Texas remains remarkably lacking in these centers. It is clear that the availability of state funding has been important in creating eligibility of health centers for federal qualification and funding, as demonstrated in the past biennium, but the organization of these centers is complex and often has not included crucial roles for medical and/or nursing programs. Although most communities in Texas that apply for FQHCs easily meet the requirements of the prospective clientele (with the high percentage of uninsured in the state), many cannot show they are financially feasible, even with federal aid, because of the extremely restrictive Medicaid program.

Furthermore, staffing FQHCs is challenging. The Task Force believes that special emphasis should be paid to increasing the role of medical residents; providing physician services; establishing loan repayment programs which encourage physicians to work at such sites; and increasing the number of advanced practice nurses who can manage

programs in collaboration with physicians. In addition, reimbursement should be modified to pay for visits to groups of physicians and to change the definitions of providers to include social workers, health educators and nurse practitioners.

Initial indications from the Health Resources and Services Administration (HRSA) of the federal Department of Health and Human Services are that no additional or new FQHCs will be funded as a result of the 2006 budget agreement. However continuing efforts should be made to strengthen existing FQHCs, support new community based clinics from other sources, and prepare for the next available opportunity to obtain additional FQHC designations.

The President's FY 2007 budget request proposed $1.963 billion for FQHCs. (This is $163 million more than what was appropriated for FQHCs for FY 2006.) The budget anticipates that this funding level will enable HRSA to establish 300 new or expanded FQHC sites in FY 2007. Of the 300 new or expanded sites, 80 sites are expected to be in high poverty counties.

Physician Availability

Recommendation 7.6:

The Task Force recommends that efforts be undertaken to ensure that each physician provide a fair and reasonable amount of care for Medicaid, Medicare and uninsured patients, as well as share the responsibility of being on call to emergency rooms.

Findings:

- In Texas, medical schools receive approximately $47,000 annually from state funds for each medical student. This totals approximately $200,000 in general revenue over a four year period (Shine, 2004).

- The overall costs associated with medical education have been estimated at $400,000-$800,000 per graduating physician (Jones and Korn, 1997).

A continuing challenge in Texas is the availability of physicians to care for Medicaid recipients and the uninsured. This is particularly exacerbated in emergency rooms, because of the reluctance of many specialists to take call, i.e. see patients in the emergency room upon request from the staff. In addition to the professional responsibility physicians have to care for the sick and the significant debt which they often incur upon completing a medical education, the Task Force emphasizes the substantial societal investment in physician education. These investments imply that physicians accept responsibility for care of all patients and taking call in emergency rooms. Careful consideration should be given to connecting physician licensure renewal to evidence of active participation in the Medicaid program or treatment of uninsured patients. Alternatively, students educated in Texas medical schools could be asked to provide a specific amount of time to care for these populations. The use of hospital based physicians or direct compensation for physician services can contribute to a solution for this problem, but will not eliminate the obligations of the profession to provide care to these populations.

Education

Recommendation 8:
The Task Force recommends implementation of an integrated approach to school health including an emphasis on nutrition, exercise, dental health, and disease management of such problems as asthma. It recommends an expansion of the School Breakfast Program, that Texas schools increase their physical activity requirements to 60 minutes a day, and that they adopt asthma management education for affected children and support staff.

Findings:

- Failure to eat breakfast has been shown to adversely affect children's ability to problem solve in school and potentially has long-lasting effects on a child's cognitive development and performance in school (Pollitt, 1995, 1982, 1981).

- Incorporating fitness or skill training for 75 minutes a day, compared to traditional physical education offered for 30 minutes three times a week, increased math scores and improved classroom behavior, while having no significant reduction in reading test scores (Sallis, 1999).

- Asthma management programs have been shown to reduce absenteeism and improve test scores (Evans et. al., 1987).

In the face of rising health costs and poor health status in Texas, a crucial opportunity for prevention that can decrease the rise of health care costs and improve health exists in the K-12 educational system. The interactions between K-12 education, health status, health promotion and prevention are extensively documented in Chapter Nine – Education and Health. The evidence is compelling that success in education is closely linked to health status. Those who are better educated are healthier, creating an environment of health behavior, which includes proper nutrition, physical exercise and a healthy lifestyle. Education about the risks of unhealthy behavior, including cigarette smoking and illegal drug use can be included as well as disease management programs to address issues of chronic illness including mental health. Programs in dental hygiene may also be very valuable in view of the prevalence of dental disease. More effective integration of school health programs with other aspects of the curriculum is valuable not only for the student, but also the community.

Health Care Research

Recommendation 9:
Academic health institutions, state and local governments, and communities, foundations and the private sector should support the development of health science research programs to study cost effective health care and other characteristics of a high quality and efficient health system.

Findings:

- Annual U.S. health expenditures per person have increased from $143 in 1960 to $6,040 in 2004 (CMS, 2004).

- As a percentage of the gross domestic product (GDP), health expenditures have increased from 5.1 percent in 1960 to 15.4 percent in 2004 (CMS, 2004).

The cost of health care continues to rise at a rate significantly greater than overall inflation. While the Task Force was not specifically constituted to analyze the elements in rising health care costs, it

believes that a number of its recommendations can decrease the rise of these costs. This requires the efficient delivery of the right care, at the right place, by the right people. The right care implies appropriate cost-effective preventive health measures. For example, the effective treatment of high blood pressure is significantly more cost effective than treatment of advanced heart failure or stroke. The use of a properly constructed formulary relying heavily upon generic drugs can produce excellent care at significantly lower costs. The organization of care so it is delivered more effectively includes the use of disease management programs for such chronic conditions as diabetes, congestive heart failure and asthma. In each of these cases the proper use of medications under supervision of a multidisciplinary health care team can reduce visits to the emergency room and admissions to the hospital, thereby reducing costs.

Health care researchers can investigate funding mechanisms, insurance and other vehicles to provide high quality health care in Texas, study health disparities and apply disciplines such as health economics to provide true value in public health and health care.

Other studies by the Texas Department of Insurance (TDI) could determine how medical loss ratios are established by insurance companies and health plans to ensure those ratios accurately reflect the portion of premium dollars that are actually used to finance health care provided to enrollees and beneficiaries. In addition, TDI could facilitate local initiatives to develop, use and evaluate the benefits and privacy risks of establishing a unique patient identifier (as suggested in Recommendation 5), including biometrics, for the creation, maintenance and access to patient health records.

Recommendation 10:

Texas should adequately invest in public health programs (including research and community health) at the state and local level.

Findings:

- Texas ranks 45th of the 50 states in vaccine coverage for children aged 19 to 35 months (TDH, 2003).

- The percentage of women over 40 who had a mammogram within the previous two years was 69 percent in Texas compared to 76.3 percent in the United States (TFFPHT, 2005).

- In 2004, Texas spent $49 per citizen per year on public health activities and services compared to the national average of $98 (CPPP, 2003).

The health status of Texans does not compare well with the rest of the United States. Immunization rates, mortality from cancer, the prevalence of diabetes, obesity, and hypertension in the population as a whole and particularly in certain ethnic groups bode poorly for the future of health of Texans. Furthermore, steadily rising health care costs place increasing pressure on individual state and local budgets. Programs of prevention that include public education and behavior modification on issues such as smoking cessation, substance abuse, and poor nutrition are likely to be the most cost effective way to reduce the prevalence of illness and mitigate against rising health care costs. Texas spends 50 percent of the average amount spent among the 50 states for public health. Commitment to increase this level of funding to 75 percent of the national average over 5 years would be a minimal start in support of effective programs of public health which would

have long-term positive impacts upon health and the control of health care expenditures.

Conclusion – A Call to Action

Now is the time for Texas to take bold steps to address the significant and pervasive problems with the lack of health insurance coverage and health care access in Texas and to protect and assure the economic vitality and health of Texas. Currently, Texas has the highest uninsured percentage in the United States and the population of Texas is predicted to continue to increase over the next 20 years. As it increases, so will the number of uninsured and potentially their percentage in the population. This will negatively impact the state's economy, which will be relying more heavily on business and industry to pay for the uninsured. In addition, Texas will begin to look even less appealing to businesses that will be affected by high health insurance rates.

Achieving the recommendations of the Task Force will require a combination of effective organization, health workforce development and financial resources. Properly implemented, these recommendations will improve the health of patients, families, institutions and communities while reducing the rise of health care costs. By increasing access to health care and insurance, improving current health care delivery models, educating an adequate and diverse health care workforce, and reducing absenteeism in schools and the workplace, Texas will provide for and protect the health of its people and the strength of its economy.

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