



# Health Care

A number of issues pose challenges for the provision of health care in Texas, including limited access to health care coverage, workforce shortages and the high cost and prevalence of chronic disease. These issues pose difficult and expensive challenges for businesses, their employees and state and local governments.

But some strategies are being developed to address these challenges. For example, disease management for chronic conditions and wellness programs can be used to hold

down health care costs for businesses; health information data can improve efficiency and quality of care; and telemedicine can bring specialty care or expert primary care to rural Texans.

Health care access is closely tied with economic development. A healthy work force is a productive work force. Preventive medicine and chronic disease management decrease absenteeism and increase productivity. In addition, occupations in the health care field — doctors, nurses and administrators — are generally high-paying jobs.

## Health Insurance

One of every six Americans and one in four Texans has no health insurance coverage.<sup>104</sup>

### DID YOU KNOW?

*Article II Health and Human Services agencies were appropriated \$27.9 billion — about 33 percent of the state budget — for fiscal 2008.*





### Texas Hospital Facts

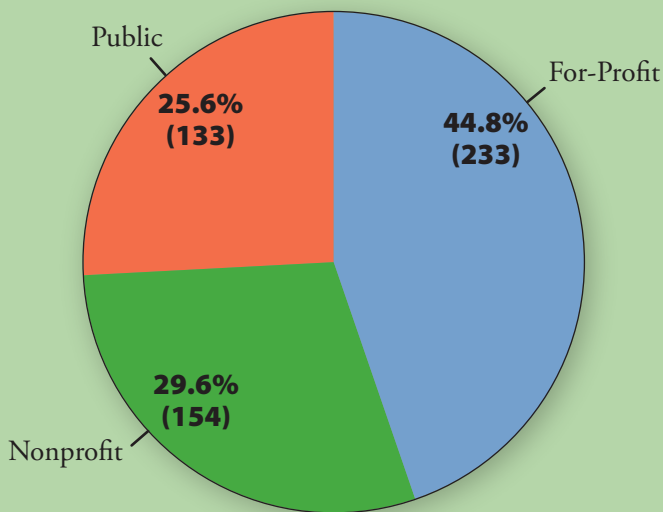
Fewer than half of Texas' 520 hospitals – 44.8 percent, or 233 hospitals – are for-profit institutions. Nonprofit (29.6 percent or 154) and public (25.6 percent or 133) hospitals make up the remainder (**Exhibit 25**).

Most for-profit and nonprofit hospitals are located in metropolitan areas, while most hospitals in non-metropolitan areas are public hospitals.

Texas is fortunate to have some of the best medical centers in the country. A recent ranking by *U.S. News and World Report* of 193 top hospitals placed 13 Texas facilities on the list, ranked nationally in various medical specialties. The University of Texas M. D. Anderson Cancer Center in Houston ranked first for cancer treatment, as well as seventh for both ear, nose and throat and urology and eighth for gynecology.<sup>105</sup>

Exhibit 25

### Acute Care Hospitals by Ownership Type, 2006



Note: Numbers may not total due to rounding.  
Source: Texas Department of State Health Services.

According to the U.S. Census Bureau, Texas has the nation's highest percentage of uninsured residents.<sup>106</sup> This poses consequences for every person, business and local government

in the state who bear extra costs to pay for uncompensated care.

About 5.7 million Texans, or 24.5 percent of the state's population, were uninsured in 2006. That figure included about 1.4 million children, or about 21.2 percent of all Texans aged 18 or younger.<sup>107</sup>

Texans who are uninsured include moderate- and low-income wage earners; younger Texans; employees who do not receive insurance through their jobs, including some small-business employees; and children in low-income families.<sup>108</sup>

### Health Insurance and Small Business

Most Americans receive health coverage through their jobs. In 2006, employment-based insurance covered 59.7 percent of U.S. residents. In that year, Texas ranked 47th among states including D.C. on this measure; just 52.2 percent of Texans, or about 12 million people, had employment-based insurance.<sup>109</sup>

In 2005, businesses with fewer than 50 employees constituted 72.4 percent of all businesses in Texas, and 49.8 percent of those companies offered health care benefits. In the U.S. as a whole, 62.2 percent of businesses of this size offered health benefits.<sup>110</sup>

For the smallest businesses, insurance rates are even lower. In Texas, 31.3 percent of employers with fewer than 10 employees offered health insurance in 2005. Nationwide, 43.7 percent of employers of this size offered coverage.<sup>111</sup>

Cost is the most common reason why people do not purchase health insurance. According to one annual survey of health premiums, costs for family coverage rose



by an average of 6.1 percent from 2006 to 2007. The average family premium, across all types of health plans, cost \$12,106 in 2007. Workers were expected to contribute \$3,281 toward that coverage.

The cost increase of 6.1 percent in 2007, while lower than the 7.7 percent rise in 2006, still outpaced the overall inflation rate by about 3.5 percent and the average increase in employment earnings by 2.4 percent. Since 2001, health insurance premiums have risen by an average of 78 percent, while inflation rose only by 17 percent, and worker's salaries by 19 percent.<sup>112</sup>

Federal law allows large companies to become "self-insured" — that is, to offer their own employee insurance backed with their own resources, and to control its costs by deciding what sort of coverage to offer. Small companies frequently cannot afford to self-insure and lack other options to reduce the cost of insurance. Instead, they must purchase coverage from insurance companies at higher rates, and if even one or two of their employees incur high medical expenses, rate hikes may price them out of the insurance market entirely.

One factor sending health coverage rates upward is Texas' large population of uninsured residents. A 2004 study by the Greater Houston Partnership found that hospitals shift the cost of providing unpaid health care to private insurers, in the form of higher charges; insurers, in turn, pass along their higher costs in the form of higher health insurance premiums. And given rising premiums, private employers may decide to drop coverage altogether, thus compounding the problem.<sup>113</sup>

### Hospitals and the Uninsured

So how do uninsured persons obtain medical care? In cities with large hospitals, they often use emergency rooms for general medical care. Under federal law, hospitals must treat anyone who shows up in their emergency rooms, regardless of their ability to pay. Thus emergency rooms often must treat many patients with conditions that do not warrant this highly expensive care, interfering with their ability to serve those patients who truly need emergency care.

In a news report on this trend, Dr. Bill Hinchey, a San Antonio pathologist and president of the Texas Medical Association, said the uninsured place a significant burden on emergency rooms. "A lot of these people will get their basic medical care in the emergency room, and that clogs our emergency rooms for truly emergent care," he said.<sup>114</sup>

A number of Texas public hospitals offer community clinics, where care is free or low-cost. The care provided by these clinics, especially for chronic diseases such as heart disease, high blood pressure, or diabetes, can have positive impacts on a hospital's bottom line. In Austin, Seton Hospital's director of community clinics, Dr. Melissa Smith, stated that patients with chronic diseases "...can have better care and we can reduce the costs for the hospital."<sup>115</sup>

Private for-profit and nonprofit hospitals also offer such clinics, where care can be delivered and costs are much less than if they were provided in a hospital. Texas Children's Hospital, a nonprofit hospital, has five pediatric health center locations in the greater Houston area, where families have access to non-emergency care.<sup>116</sup>

**DID YOU KNOW?**

*In 2006, there were 639 registered nurses and 65 primary care physicians for every 100,000 Texans.*

Emergency room care for people without insurance is largely uncompensated, or unpaid, by government programs or any other third party. But *someone* has to pay for this treatment. In the case of public hospitals, local taxpayers end up bearing much of the cost through their local property taxes.

And again, hospitals also shift this cost to insurers in the form of higher bills, driving up the rate of health insurance for both employers and employees — and driving some employers out of the market.

Texas hospitals reported spending \$10.2 billion on uncompensated care in calendar year 2005.<sup>117</sup> Roughly two-thirds of the cost of uncompensated care is borne through higher insurance premiums paid by insured patients and their employers. Various federal, state and local government programs pay the remaining third.

In 2005, Texas families spent an extra \$1,551 in health insurance premiums to cover the unpaid health care bills of the uninsured. In that year, the average premium cost for family coverage in Texas was \$11,533, of which employers paid about 75 percent and families paid about 25 percent. Texas' average premium was 7.5 percent higher than the national average of \$10,728.<sup>118</sup>

### The Nursing Shortage

Hospitals must have enough health care providers to pursue their missions effectively. They rely on a wide variety of specialized professions, but the most critical health care work force issue identified in the *2005-2010 Texas State Health Plan*, a major state planning document, issued by the Texas Department of State Health Services, was a nursing

shortage. In 2005, Texas had 144,602 registered nurses practicing in Texas, with 85.8 percent working full time and 14.2 percent employed part-time.<sup>119</sup>

The Texas Center for Nursing Workforce Studies and the Texas Department of State Health Services estimated that Texas will be some 71,000 full-time nurses short of the number it will need by 2020. If Texas is to meet this projected need, its 84 nursing programs must educate an estimated 25,000 new nursing graduates annually by 2020, roughly four times the 6,300 who graduated in 2005.<sup>120</sup>

When nurses are in short supply, hospitals must reduce their services, leading to overcrowded emergency rooms, longer waits for elective surgeries and limited or discontinued programs.<sup>121</sup> More important, the quality of patient care can suffer. A number of studies have found that more hours of care by registered nurses lead to better care and fewer complications. Increases in registered nurse-to-patient ratios have been associated with lower hospital-related mortality rates as well as shorter hospital stays.<sup>122</sup>

One of the biggest problems limiting nurse training is a lack of qualified nursing faculty. Many qualified students are turned away each year simply because nursing programs are full.<sup>123</sup> In 2006, the American Association of Colleges of Nursing estimated that U.S. nursing colleges and universities turned away more than 32,000 qualified applicants, primarily due to a shortage of nursing educators.<sup>124</sup>

In 2005, the Texas Higher Education Coordinating Board reported that 12,250 qualified applicants — 54 percent of the total — were not offered admission to Texas



nursing programs. (It should be noted that this number may include duplicates, since students can apply to multiple schools.) In 2005, administrators of Texas nursing programs reported that many qualified applicants were not admitted due to a lack of budgeted faculty positions, qualified faculty applicants and clinical teaching space.<sup>125</sup>

Texas faculty salaries lag behind what nurses with advanced degrees can make in other jobs. Nurses with a master’s degree in an advanced practice specialty are qualified to teach, but often can earn more money as nurse practitioners or in advanced clinical or administrative positions. For example, a Texas instructor in a bachelor’s degree nursing program earned an average of \$5,064 monthly in 2004, but a nurse manager in

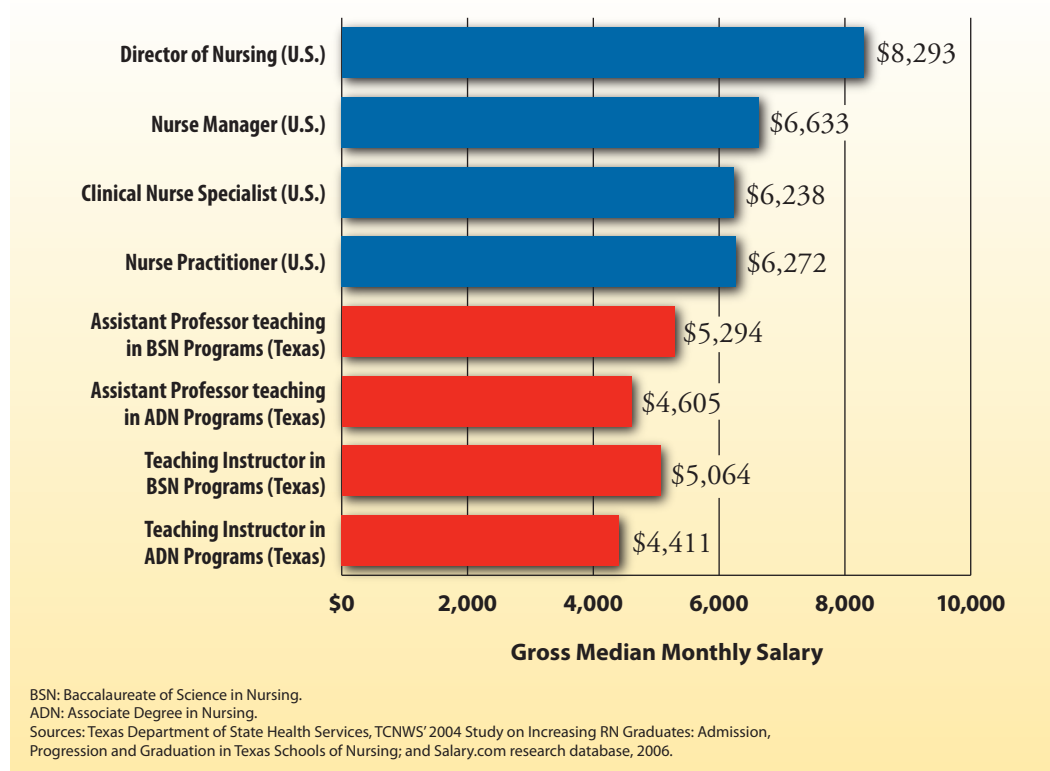
the U.S. earned an average of about \$6,633 (**Exhibit 26**).<sup>126</sup>

The nursing shortage is even more acute in rural Texas, where only 9 percent of Texas’ registered nurses practice. Nonmetropolitan counties in Texas have a much lower ratio of registered nurses to population than urban counties. In 2006, urban areas had a ratio of 678 registered nurses to 100,000 residents, compared to 406 registered nurses per 100,000 in rural areas.<sup>127</sup>

Some progress has been made in recent years, under the Texas Professional Nursing Shortage Reduction program. In 2007, the Texas Legislature appropriated \$7.4 million to the Texas Higher Education Coordinating Board for the program. The funding will be distributed to nursing programs showing

Exhibit 26

**U.S. and Texas Median Monthly Salaries for Nursing Positions**





an increase in the total number of nursing graduates at all academic levels. As much as \$11,850 per new graduate could be earned by nursing programs, and the funding must be used to create additional nursing faculty positions, add salary supplements for nursing faculty or expand nursing faculty capacity. The Nursing Innovation Grant program is a competitive grant program designed to increase the number of nurse graduates in Texas and has focused on recruiting and retaining nursing faculty and students. In 2006-07, \$825,556 was awarded to three universities that practice “regionalization,” under which nursing programs share faculty, space, and other resources, and another \$328,540 went to efforts to ensure that nursing students successfully completed their programs.<sup>128</sup>

### The Cost of Chronic Disease

Chronic diseases such as heart disease, stroke, cancer, asthma, arthritis and diabetes are major contributors to the rising costs of health care.<sup>129</sup> Chronic diseases account for three out of every four deaths in Texas and the U.S. Such diseases are prolonged, do not resolve themselves spontaneously and are rarely cured completely.<sup>130</sup>

Unhealthy behaviors such as poor nutrition, tobacco use and inactivity can influence the development of chronic disease. Tobacco use is the most common cause of premature death in Texas; more than 24,800 Texans died due to its use in 2001 — more than from alcohol, automobile accidents and several other preventable causes of death combined.

Heart disease takes the largest toll; it was the leading cause of death in Texas in 2003.

Twenty-seven percent of Texas deaths, or 41,654 in that year, were due to diseases of the heart. And heart disease is expensive to treat. According to the Texas Department of State Health Services, a 2003 hospital stay related to heart disease resulted in an estimated \$8,995 average charge per day. In all, Texas hospital charges for heart disease exceeded \$5.2 billion in 2003. Medicare, the federal health insurance program for elderly and disabled people, paid 56 percent of this amount. Commercial insurers paid 24 percent and Medicaid, the state’s health care program for poor, elderly and disabled people, paid about 4 percent.<sup>131</sup>

Nearly two-thirds (64.1 percent) of Texas’ adult population is estimated to be overweight or obese. Overweight and obesity are linked to an increased risk of heart disease, diabetes, and several other chronic illnesses. About 7.9 percent of adult Texans have diabetes, and the chance of developing diabetes goes up with age. An estimated 17.6 percent of Texans aged 65 or older have diabetes.<sup>132</sup>

And today, many children are being diagnosed with Type 2 diabetes, a condition seen only rarely in children 20 years ago. One researcher estimated that between eight percent and 45 percent of recently diagnosed cases of diabetes among children and adolescents in the U.S. are Type 2 diabetes. The development of a chronic disease so early in life has significant consequences for the costs of health care.<sup>133</sup> The American Diabetes Association estimated that direct and indirect the costs of diabetes in the U.S. were \$132 billion in 2002. Annual health care costs for a person with diabetes was \$13,243 in 2002, compared to \$2,560 annually for people without diabetes.<sup>134</sup>



## Disease Management and Wellness Programs

To hold down health care costs due to chronic disease, many states and private companies have implemented *disease management programs*. These programs coordinate health care services delivered to persons with a chronic disease or condition, and educate them about how to care for themselves in order to prevent expensive hospitalizations or the development of further medical complications. Patients may be monitored more closely, and their doctors may receive professional education on the best ways to improve the quality of health care. The goal of disease management is to involve patients in their own health care and to improve health outcomes while reducing costs.<sup>135</sup>

In Texas, major companies including USAA, H-E-B, and Dell Computer offer workplace wellness programs. USAA, a San Antonio-based financial services company, offers its employees on-site fitness centers, smoking cessation and weight management classes, and healthy food choices in cafeterias and vending machines. The company's overall wellness program participation rose to 68.5 percent in 2005. Employees who have participated report significant decreases in weight, smoking rates and other health risk factors. USAA employees' claims under workers' compensation insurance have declined, as has absenteeism. The decline in absenteeism alone is expected to save USAA more than \$105 million over three years.<sup>136</sup>

H-E-B, Texas' largest independent grocery company with 65,000 employees, operates a "Healthy at H-E-B" wellness initiative. Each employee who completes a health risk

appraisal receives a financial incentive. By the fourth year of the wellness program, 79 percent of employees participated. H-E-B's health care costs were rising by 25 percent annually before starting the program, but increased by just 2.9 percent in 2006. In 2005, they actually fell, by 3.7 percent.

Dell Computer's "Well at Dell" program offers on-site wellness and disease management programs. A 24-hour health hotline can answer employee's health care questions. Since Dell's program began in 2004, participants have experienced reduced cost increases, primarily due to reduced inpatient admissions.<sup>137</sup>

## Health Information

Health information data, maintained electronically, can be used to improve the quality and efficiency of health care. Health data and health technology range from a simple electronic medical records system in a doctor's office to complex, interwoven systems of doctors, hospitals, specialists, pharmacies and labs that can share and update patient information electronically. Such information can improve the quality of health care and patient safety, while reducing administrative costs and eliminating the need for duplicate medical tests.<sup>138</sup> In 2004, the U.S. Department of Health and Human Services estimated that a national health information database could save \$140 billion annually.<sup>139</sup>

Electronic medical records can be lifesavers. New Orleans residents who fled to Houston in the wake of Hurricane Katrina in 2005 lost many things, including their medical records. One group of survivors, however, came with their medical records intact. For

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veterans who sought care at the Michael E. DeBakey Veterans Affairs Medical Center, medical histories, lab reports and prescription drug records were available immediately and in full on an electronic system.<sup>140</sup>

Yet physicians and hospitals have a long way to go in adopting existing technologies. This means that it is more difficult to use medical records to improve medical care, measure the quality of care, or reduce errors. Federal laws and regulations on health information privacy pose additional complications in using such data. Privacy and security are key issues in handling patient records.<sup>141</sup>

Most doctors' offices and hospitals still store medical records on paper. Only one quarter of U.S. physicians reported using full or partial electronic medical records in 2005.<sup>142</sup>

A 2005 survey by the Texas Medical Association found that only 27 percent of Texas physicians were using electronic health records. Many doctors stated that cost was the primary factor preventing them from adopting electronic systems. Estimated median costs per doctor for automation were put at \$20,000, and larger groups of physicians reported higher estimated costs.<sup>143</sup>

A 2006 Rural Health Resource Center survey of 58 Texas rural hospitals found that only 48 percent of respondents had a formal information technology plan. Most had computerized health claims submission, payroll and admissions processes, but an overwhelming 84 percent did not have electronic medical records.<sup>144</sup>

Some Texas communities are developing regional initiatives to link their medical facilities and data electronically. In Austin, for example, a pilot program called Critical

Connection links South Austin primary care physicians with specialists and the South Austin Hospital. The program intends to add labs and pharmacies to the network as well. Physicians using the system will be able to see and enter test results, specialists' consultation notes and hospital visit records on their office computers or at the hospital.<sup>145</sup>

### Telemedicine

Some rural areas lacking in health care professionals or transportation to health care centers are turning to telemedicine. Telemedicine or, as it is sometimes called, telehealth, involves the use of information technology to provide long-distance health care.<sup>146</sup>

Using videoconferencing or other specialized equipment, doctors can sit in their offices miles away from a patient and provide expert or specialist care, helping to diagnose or treat illnesses. They can see and interact with patients and other health care providers by the patient's side. And doctors and nurses in remote areas can use telemedicine to learn new techniques or continue their medical educations without traveling hundreds of miles.

Telemedicine can be used to reduce or eliminate unnecessary health care costs. A Texas Tech physician and burn specialist, Dr. John Griswold, said that before telemedicine started, burn patients would stay home and get even sicker, until they needed hospital care. Now, he said, "We're seeing the patients sooner, with almost no complications or readmissions."<sup>147</sup>

Telemedicine technology is readily available, but its cost can be prohibitive. Many telemedicine projects obtain funding from federal sources or nonprofit groups, but such funding has been limited.<sup>148</sup>



At present, Texas' Medicaid program will not reimburse the cost of telemedicine equipment. Furthermore, under current Texas rules, Medicaid will provide reimbursement only for consultations or interpretations of medical data delivered through telemedicine, and for a standard office visit to the remote physician.<sup>149</sup>

Several recent state laws have provided a basis for increased Medicaid coverage of telemedicine. Most recently, 2007 legislation requires the Texas Health and Human Services Commission, the state's Medicaid administrator, to better provide for reimbursing remote consulting physicians and health care professionals who are present with a patient at the remote site.<sup>150</sup> Previously, Medicaid would only reimburse the provider at the patient's side for a standard office visit.<sup>151</sup>

Texas' health science centers, most notably Texas Tech University Health Sciences Center and the University of Texas Medical Branch at Galveston (UTMB), have paved

the way for telemedicine in the state. Since 1990, Texas Tech has conducted more than 18,000 consultations via telemedicine technology. Specialists in orthopedics, general surgery, internal medicine, urology, gastroenterology, neurology, psychology, pediatrics and psychiatry have shared their expertise.<sup>152</sup> A physician's office in Alpine, in the Big Bend region, is linked electronically to Texas Tech health experts; a school nurse in Hart, Texas relies on their expertise as well. Texas Tech also operates a correctional telemedicine program for Texas Department of Criminal Justice (TDCJ) facilities in the western part of the state.<sup>153</sup>

UTMB has used telemedicine since 1995. At this writing, the school provides indigent medical care in Brazoria and Liberty counties; contracts with five school districts and counsels domestic abuse victims at a women's crisis center in Nacogdoches. UTMB's telemedicine system also provides correctional health care for inmates at the TDCJ facilities.<sup>154</sup>

### Health Care Questions for Further Consideration

- What types of strategies can Texas explore to address the shortage of registered nurses?
- What kinds of programs will help Texas recruit high-quality faculty to nursing schools?
- How can rural Texas compete for medical professionals?
- What can Texas do to keep health insurance costs down?
- What can Texas do to make medicine more accessible and affordable to rural areas, including telemedicine?