

Immunization Policies and Funding in Texas

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ABOUT TEXAS

Texas is a state of considerable size, diversity, and contrasts. It is the second most populous state in the nation, with approximately 19.3 million people living in its 262,000 square miles. Of its 254 counties, 196 are rural, with 62 of these classified as “frontier”—containing six or fewer persons per square mile. At the same time, 82% of the population lives in urban areas, a slightly higher proportion than for the country as a whole (Wiener et al., 1998).

The population of Texas increased at an annual rate (10.2%) almost twice the national average during the first half of the 1990s (Wiener et al., 1998). Its population is both younger (29.6% under age 18 compared with 26.8% nationally) and poorer than the nation as a whole (measured by both per capita income and percentage living below the federal poverty level) (Wiener et al., 1998). Some 5.6 million Texans are under 18 years of age. This cohort is especially diverse: 47% Anglo, 37% Hispanic, almost 13% black, and the remaining 3% Asian/Pacific Islander and Native American (Annie E. Casey Foundation, 1999). Almost 9% of the babies born in the United States each year are born in Texas (National Vital Statistics Reports, 1999; data for 1997).

The Texas economy has diversified beyond the traditional categories of oil, gas, and agriculture. The passage of the North American Free Trade Agreement (NAFTA) has resulted in increased trade and significant growth in manufacturing and service industries.

The unemployment rate is relatively low and compares favorably with the national average. There is, however, a significant variation between the various geographical areas of the state, with the Border Region (McAllen–Edinburg–Mission) having unemployment rates in excess of 17%. This area of the state continues to have “colonias” with very poor water and wastewater treatment facilities (Texas Health and Human Services Commission, 1999). The Texas legislature acted to correct this health care problem in the session that ended in May 1999.

The median family income in Texas was \$34,216 in 1997, more than \$2,000 below the national average of \$36,399 (U.S. Census Bureau, 1997). Public spending for health care for poor families compares even less favorably. Texas is significantly lower than the nation as a whole in public expenditure levels for Aid to Families with Dependent Children (AFDC) benefits, Supplemental Security Income (SSI) benefits for children, and Medicaid spending for children. Texas does exceed the national average in spending on Food Stamps (Pindus et al., 1998).

According to *Kids Count 1999*, a report by the Annie E. Casey Foundation, Texas ranks near the bottom of states in several key children’s categories. With 25% of its children living in poverty, Texas ranks 42nd. With regard to teen birth rates (births per 1,000 females ages 15–17),

Texas ranks 48th. Still with 76% of its 2-year-olds immunized, Texas is just slightly lower than the national average of 78% (1998 data).

STATE GOVERNMENT

Most observers would classify Texas as a conservative state with a weak role for the governor and a strong role for the lieutenant governor and legislature in establishing state policies and spending levels. The governor's powers have often been referred to as the powers of appointment, veto, and persuasion.

With few exceptions, state agencies and institutions operate under the citizen board concept with board members appointed by the governor and confirmed by the Senate for overlapping terms.

The legislature meets every other year for 140 days. The lieutenant governor serves as chairman of the Legislative Budget Board (LBB), a joint committee of the House and Senate. The LBB proposes a balanced budget every two years as required by the Texas Constitution. The LBB can reallocate funds with the approval of the governor when the legislature is not in session. The governor does have line-item veto authority with respect to the budget and recently utilized this authority to eliminate more than \$50 million in spending that had been authorized by the legislature for the biennium beginning September 1, 1999.

During the last two legislative sessions, Texas has had a Republican governor, a Senate with a very slight Republican majority, and a House with a Democratic majority. State tax cuts of more than \$2.8 billion have been realized, suggesting that Texas remains a conservative state by any standard of measure.

The health and human service agencies function under what more closely resembles a traditional cabinet agency. The Health and Human Services Commission (HHSC) is an umbrella agency headed by a chief executive officer (CEO) appointed by the governor and confirmed by the Senate. Under the umbrella are approximately a dozen operating agencies of varying size and scope, including the Department of Health with a \$6.5 billion annual budget and the Agency for the Deaf and Hard of Hearing with an annual budget slightly in excess of \$1.2 million. Citizen boards establish the policies for the operating agencies. The state Medicaid director is on the staff of HHSC, and components of the Medicaid programs are administered in several operating agencies—the Department of Health, Department of Human Services, Department of Protective and Regulatory Services, and Department of Mental Health and Mental Retardation. The Department of Health administers the acute care portion of Medicaid, WIC (the Women, Infants, and Children Program), Immunizations, and EPSDT (Early and Periodic Screening, Diagnosis, and Treatment; called Texas Health Steps). The Immunizations Program is in the communicable disease component of the Health Department organizational structure and includes adult as well as childhood immunizations.

The Texas Department of Health (TDH) operates more than 60 programs from a central office located in Austin and through 11 regional offices located throughout the state. TDH also operates two hospitals that started many years ago as treatment centers for tuberculosis. The regional offices were established to provide services in areas lacking a local health department (LHD). Currently, there are 66 LHDs in Texas that contract with TDH for services in a number of program areas, including immunization services.

STATE HEALTH CARE ENVIRONMENT

Texas depends heavily on its counties and public hospitals to provide health care for its indigent population; the Texas Constitution makes counties responsible for this role. The state also has a small county indigent health care program (\$5 million–\$7 million in state funds annually) to assist counties in providing care to this population. Nearly one-quarter of the state's population was uninsured in 1997 (4.7 million), which ties Texas with Arizona for first among all states in percentage of uninsured residents. Of those uninsured, 1.4 million were children (Texas Health and Human Services Commission, 1999).

Medicaid

The acute care portion of Medicaid transferred from the Department of Human Services to the Department of Health on September 1, 1993. A key benefit of this transfer was the medical expertise that resided in TDH staff.

Two and one-half million Texans received Medicaid services in 1997. Almost one-half (47%) of the births in Texas are covered by Medicaid. Medicaid accounted for 25% of all state-level spending and 17% of spending from state revenues with \$10 billion dollars spent on Medicaid in 1997. While Texas ranks third among the states in total Medicaid spending, it is 33rd in average spending per recipient (1996 data).

Medicaid monthly enrollment peaked in January 1996 at 2.1 million and has been on a steady decline since that time, falling 14%, or by more than 274,000 participants. This decline is expected to continue. HHSC forecasts project that Medicaid enrollment will drop another 3% annually from the 1996 figure into the year 2001. This trend coincides with Medicaid enrollment declines all over the country.

Individuals who qualify for Temporary Assistance for Needy Families (TANF) automatically qualify for Medicaid. Texas' reputation as a state that is conservative when it comes to social welfare services is supported somewhat by the fact that only three states (Alabama, Mississippi, and Tennessee) had lower maximum benefits than Texas' \$188 per month for a family of three. The national average is more than \$400 per month for a family of three (Texas Health and Human Services Commission, 1999).

The Children's Health Insurance Program

The Children's Health Insurance Program (CHIP) affords Texas the opportunity to address the significant number of low-income uninsured children. Of the estimated 1.4 million children who are uninsured, roughly 1 million meet the income eligibility standards for Medicaid or CHIP.

Texas implemented Phase I of its CHIP program on July 1, 1998, by expanding eligibility for Medicaid to include children age 15–18 who live in families with incomes under 100% of the federal poverty level (FPL).

Recently, the legislature extended CHIP coverage to children from birth through 18 years in families with net income of 200% of FPL or less who do not qualify for Medicaid. Coverage became available on a statewide basis beginning in the spring of 2000. The benefits package is designed to meet the needs of healthy children, as well as children with chronic health conditions. All basic services will be covered, such as doctor visits, hospitalization, and prescription medication. CHIP will also provide some vision, dental, and hearing services. Also covered will be a

full range of behavioral health, durable medical equipment, habilitative and rehabilitative services, and speech, physical, and occupational therapies.

Families will be required to contribute to the cost of covering their children based on a sliding income-related scale. Costs to families will range from \$2 to \$5 for office visits, \$10 to \$25 for emergency room visits, and \$2 to \$10 for prescriptions, with premiums that range from \$15 annually to \$18 per month.

CHIP enrollment is projected to reach more than 377,000 by the fall of 2001 and more than 445,000 by the same time in 2003. The cost of the program, three-quarters of which will be paid by the federal government, is projected to be nearly \$372 million over the next two years (Texas Children's Health Insurance Program, 1999).

Managed Care

Texas has implemented Medicaid managed care by geographical area, beginning with a Travis County pilot in 1993, and has continued to expand to additional service delivery areas. Currently, there is managed care in six service areas in the state. Four service delivery models are utilized: (1) traditional Medicaid, (2) primary care case management, (3) health maintenance organization (HMO), and (4) prepaid health plan (PHP). As of December 1998, 425,000 Medicaid recipients were enrolled in managed care, nearly 20% of the state's Medicaid population. In 1999, Medicaid managed care expanded to two new areas of the state, adding another projected 85,000 in the Dallas service area and 50,000 in the El Paso service area.

The Texas Department of Health has concluded that managed care has achieved significant financial savings (\$35.6 million in fiscal year [FY] 1997); access to primary care providers was improved and enrollees were satisfied with their physicians; providers were generally pleased with the timeliness of reimbursement; emergency room visits were significantly lower when compared to traditional Medicaid; there was not a significant change in the percentage of deliveries of "complex" newborns; and providers felt that access to and continuity of medical care either increased or were not affected by clients being in managed care (Texas Department of Health, 1998); (Texas Health and Human Services Commission, 1999).

Texas Health Steps (EPSDT)

The primary purpose of Texas Health Steps (THSteps) is to provide preventive and primary health and dental care to Medicaid children. The program provides a full range of services to clients, including medical checkups, immunizations, dental care, vision, hearing, screening, and case management services. Outreach staff provide assistance to clients in accessing health care through managed care enrollments by locating a provider in fee-for-service delivery systems and in accessing other services.

Since 1994, the program has undergone extensive redesign. Staff increased from 10 in 1993 to almost 500 in 1999. Outreach staff are located in each of the 11 public health regions and provide outreach and informational services to Medicaid clients in all 254 counties. A statewide toll-free line has been established, and an outreach tracking system has been developed and implemented.

During state fiscal year (SFY) 1998, more than 4 million outreach encounters were documented in the outreach tracking system. Eligible Medicaid clients are contacted by outreach staff and informed about the program when they are newly enrolled in Medicaid, recertified for Medicaid, due for a medical or dental checkup, and overdue for service. Each outreach encounter pro-

vides clients with information concerning preventive health, medical and dental care, and immunizations and WIC.

During 1999, THSteps established 11 key health outcome indicators for the EPSDT population. One of these indicators is “percent of 3–24 month old Medicaid children who are up to date on immunizations by race/ethnicity.” Currently, baseline data are being collected. Once baseline data are analyzed, specific goals will be developed for each measure and targeted intervention activities developed. This effort should prove beneficial in future efforts to analyze immunization programs (TDH Summary Paper on Texas Health Steps, 1999).

IMMUNIZATIONS

The measles outbreak in Dallas and Houston had a significant impact on the move to improve immunization levels in Texas in the 1990s. Measles cases took a dramatic and costly upswing between 1989 and 1991, with more than 55,000 cases reported nationwide. The outbreak resulted in an estimated 11,000 hospitalizations and some 130 deaths. The measles resurgence was attributed primarily to a failure to immunize preschool-aged children on time, in this case early during their second year.

Texas reported 9,400 measles cases and 26 deaths associated with measles between 1988 and 1992. In 1990, Texas experienced its worst measles outbreak since 1971, with 104 counties reporting almost 4,500 cases and 12 deaths. Dallas, Denton, El Paso, Harris, Tarrant, and Travis Counties experienced major epidemics. Almost 1,900 cases were reported in Dallas County.

In Dallas and Harris (Houston) Counties alone, almost 800 children were hospitalized during the 1990 outbreak. More than \$8.5 million was spent on hospital care for these cases. It is estimated that to immunize these children, the vaccine itself would have cost \$12,000.

Smaller measles outbreaks occurred in 1991 in Lubbock and Travis Counties, and in 1991 and 1992 in South Texas with more than 1,000 cases. In 1992, Texas accounted for one-half of the nation’s measles cases. The cases in South Texas were not entirely unexpected since Texas has the largest international border, some 900 miles, which has been a major source of disease outbreaks.

In 1992 the Children’s Defense Fund published the results of a survey that ranked Texas 50th nationwide in the percentage of 2-year-old children who were appropriately immunized. Immunization rates at that time were in the 30% range for 2-year-olds. There was no place to go but up. This provided further impetus for public health to focus on immunizations.

State Legislation

There were three places to start in Texas—legislation, funding, and the programmatic changes that could be initiated as a result of legislation and funding. Senate Bill 266, passed in 1993, mandated age-appropriate immunization of every child in Texas. The state funding level of \$40.3 million for the 1992–1993 biennium was increased to \$72.2 million to implement this legislation in the FY 1994–1995 biennium (Figure 1). This budget increase allowed for the purchase of increased supplies of vaccine, infrastructure buildup, some marketing activities, and the development of a statewide tracking system.

STRATEGIC INITIATIVES—“SHOTS ACROSS TEXAS” AND NONTRADITIONAL PROVIDERS

Shots Across Texas

The marketing activities were a very key component. The Shots Across Texas initiative began in 1993 to increase awareness for immunizations among health care providers, parents, and guardians. TDH supports the formation of public–private partnerships, sponsors immunization activities, facilitates the development of local coalitions, works toward increasing access and decreasing barriers to immunization, and markets and advertises immunization services. Highlights of this initiative include the following:

1. At one time, more than 200 local immunization coalitions were actively functioning in Texas.
2. Thirty corporations, foundations, and organizations have contributed funds or made in-kind contributions valued at almost \$1 million. The Aetna Foundation alone contributed \$500,000.
3. More than 800 Texas television and radio stations have aired public service announcements promoting immunizations.
4. Shots Across Texas developed and produced English and Spanish versions of brochures, posters, and press kits.
5. TDH, in conjunction with the Texas Medical Association, sent comprehensive provider education packets to more than 13,000 primary care physicians in Texas.
6. A media campaign featuring Texas celebrities representing various ethnic groups was implemented.
7. Your Child’s Health Record, a permanent health record for parents, was implemented. Produced jointly by the March of Dimes and TDH, these records are distributed to families of all babies born in Texas hospitals as well as migrant families with small children and children in foster care.
8. During the summer of 1997, Hallmark Cards offered to provide four-color, infant immunization reminder greeting cards to health departments in all states and territories. TDH accepted Hallmark’s offer and plans to continue the greeting card project through 2002. TDH coordinates the distribution of cards through hospitals and birthing centers that utilize a variety of strategies to present the greeting card to new parents. Preprinted onto all Hallmark cards are personalized messages from respective states’ governors and their spouses.

Nontraditional Providers

These efforts resulted in additional immunizations being provided through nontraditional providers. One of the most prominent of these was the Women, Infants, and Children Program.

Coordination with Medicaid and WIC

In March 1993 (before the provision of additional state funds), the WIC program began offering immunizations to clients and their children during regularly scheduled WIC visits. Most WIC clinics are now providing on-site immunizations. This was a natural progression in terms of “one-time shopping,” which was a theme and focus at that time in Texas. WIC provides services

to approximately 500,000 infants and preschool children each month, making WIC clinics an excellent source to reach children who may otherwise be unimmunized.

In July 1993, the Medicaid program implemented a \$3 per dose payment to providers who immunize Medicaid-eligible children. Between September 1993 and August 1994, the number of physicians who requested vaccines from TDH to immunize these children increased 24%. In 1995, the reimbursement rate was increased to \$5 per dose. Both of these increases were executive management decisions made by TDH. Currently, there are more than 2,000 Medicaid and Vaccines for Children (VFC) providers in Texas who give immunizations as part of Texas Health Steps (EPSDT). Staff from the immunization and Medicaid programs meet monthly to review issues and policies of mutual concern.

Military Initiatives

The Partnership for Health: Civil/Military Cooperative Action Program for Texas brought together the resources of TDH, the U.S. Army, and the Texas Army National Guard (TARNG) to offer free preventive medical services to an underserved population. At 1- to 3-day clinics, military and civilian public health personnel worked side by side to administer vaccines. In 1993, two large clinics were held in Starr County in South Texas. More than 5,800 people attended the clinics, and more than 9,200 doses of vaccine were given. In August 1994, the TARNG gave more than 2,000 immunizations at various sites in Houston.

Emergency Room Staff

TDH also encouraged, promoted, and worked with emergency room staff, emergency medical personnel, and school district personnel to increase the number of doses of vaccine given to Texas children. Paramedic volunteers immunized more than 3,700 people in one public health region of TDH.

Volunteers in Service to America (VISTA)

During the summer of 1993, a pilot project of 100 VISTA volunteers did outreach for immunization in five Texas communities. Their summer-long efforts helped to relieve pressure on the public health system during August when children get their shots before school starts. The door-to-door outreach efforts were very effective as referrals were made to three public health programs—immunization, WIC, and EPSDT. This approach was adopted by several other states.

There were also special initiatives with other state agencies. In July 1993, TDH and the Texas Department of Human Services (TDHS) signed a memorandum of understanding in which the agencies agree to cooperate in providing immunization services to AFDC participants. TDHS subsequently adopted a policy that requires immunizations for participants in public assistance programs.

STATE AND FEDERAL FUNDING

Three significant sources of funding that figured significantly during this time period aided greatly in the enhancement of immunization activities in Texas. The Vaccines for Children program was new and became effective in October 1994, the second year of the 1994–1995 biennium in Texas (Figure 2). Increases in federal Section 317 infrastructure funding began in 1994,

peaked in 1995, and then leveled off to slightly above previous historical levels. TDH cites the flexibility provided to states as a key and essential component in the success of immunization efforts in Texas (Figures 3–5).

State funding for the Immunization Program varied during the 1990s, but the state funding commitment has remained above levels of funding prior to the advent of VFC. State funding for the 12 years beginning with SFY 1990 was characterized by (1) a low annual funding level of \$13.5 million in 1990; (2) a high annual funding level of \$36.1 million in 1994 and 1995; and (3) an increase to an annual funding level of \$25 million for 2000 and 2001, with the recently enacted General Appropriations Act (Figure 1). Texas has been successful in securing state funding for vaccines and has found it more challenging to make the case for the infrastructure needs of the program and the impact of federal funding on that infrastructure.

The result is that the funding of immunizations in Texas is currently close to a one-fourth state and three-fourths federal proposition (Figure 6). While state funds now purchase only 8% of the vaccines for children 0 through 18 years of age (Figure 7), the state is funding over 60% of the infrastructure necessary to utilize those vaccines (Figure 8).

Overall funding for the Immunization Program increased during the 1990s (Figure 9). Not surprisingly with all of these funding increases and their associated impacts on the basic funding structure of the Immunization Program, there was an increase in the amount of “carryforward” funds in the program. This increase can be considered and analyzed in the context of the uncertainty of the times and the unprecedented changes that impacted the Immunization Program, as well as with the understanding that a carry-forward of some basic amount is both desirable and prudent in the management of a vital public health program (Figure 10). The changes and concerns were many:

1. Would increases in VFC funding be sustained over the long term?
2. Could strategic initiatives be started with the assumption that funding sources would be recurring?
3. What would be the state’s position on full-time equivalent (FTE) positions? A cap on FTEs has been a reality in the General Appropriations Act since 1996. Similar FTE issues were occurring at the city and county levels of government also.
4. What would be the significance of the change in the number and location of the state’s public health clinics?
5. Would there be a dramatic change in the provider mix?
6. What would be the extent of an increasing number of new vaccines and increases in the costs of traditional vaccines (Figures 11–14)?
7. Were there unforeseen factors that would affect the state’s ability to impact positively a changing birth cohort (Figure 15) and the state’s immunization rates (Figure 16)?

While the ability of a government agency to implement expeditiously such an increase in funding can be problematic, especially with all of these uncertainties, TDH began to aggressively pursue this objective with many new initiatives in addition to those noted previously. It should also be noted that although two of the funding sources (Section 317 and state) are above the levels of 1993, they are below the historical highs of 1994 and 1995 (Figures 1 and 6). So some concerns became short-term reality, and the changes on the horizon are just as perplexing as those of the mid-1990s.

Also, two cities, Houston and San Antonio, are funded directly by the Centers for Disease Control and Prevention (CDC). Direct assistance funding for Houston is reflected in the figures included in the charts for TDH. Both cities also receive vaccines purchased with state funds, and these are reflected in the other charts.

Innovative Strategies with Section 317 Funding Increases

TDH made the choice to implement innovative strategies aggressively. One example is that TDH secured authority to pay overtime for nurses employed by TDH in certain programs so these nurses could be available to provide immunizations at more convenient times for parents and their children.

Vaccine Availability and Distribution System

TDH has distributed vaccines to local health departments or districts, public health regions (PHRs), and private physicians for more than 20 years. In September 1993, TDH implemented a revised vaccine distribution policy that increased the availability of state-purchased vaccines to both public and private health care providers. This policy has enabled private practitioners to offer lower-cost vaccines in their offices or clinics rather than referring children to public health clinics. In the first year of this expansion, the number of physicians who received vaccines from TDH increased 24%.

The TDH Pharmacy Division and vaccine manufacturers ship vaccine directly to LHDs or districts and PHRs. In most areas, the LHDs and PHRs redistribute vaccines to providers and private physicians. To maximize state funding, TDH requested and received authorization for manufacturers to ship directly to eight sites that serve as vaccine depots. These sites redistribute vaccines to providers and private physicians within their respective areas.

In June 1999, the Immunization Division and Pharmacy Division began a pilot to test the feasibility of shipping vaccines directly to all provider sites from the Pharmacy Division. If the pilot project is successful, TDH plans to begin shipping vaccines from the Pharmacy Division to all providers not serviced by the eight vaccine depots.

Vaccines for Children

When the Vaccines for Children Program began October 1, 1994, TDH was distributing vaccines to approximately 600 providers. Most of these providers were in the public sector. As of July 1999 there were approximately 7,225 physicians enrolled in the program (Figure 17). The VFC program has resulted in more children being immunized with state-supplied vaccines. In 1993, 4.3 million doses were administered in Texas. In FY 1998, this figure increased to 5.6 million doses, an increase of 29% (Figures 18 and 19).

The proportion of children immunized in the public sector has decreased since the advent of VFC. In 1993, the percentage of children immunized in the public sector was approximately 50%; results of a 1998 survey indicate that this percentage had decreased to 33%. Conversely, the proportion of children immunized in the private sector increased from 50 to 67%.

State-supplied vaccine has shown similar shifts between the public and private sectors. In 1993, almost 75% of state-supplied vaccines were administered in public clinics; by 1998, the proportion had decreased to just under one-half.

PROVIDERS: PARTICIPATION AND PERCEPTIONS

Twenty to thirty years ago, vaccines were fewer and much less expensive; immunization schedules were simpler; the majority of young mothers stayed home with their children; and most families used private doctors for all their health care needs. All this has changed (Figures 11 and 20).

Fear of liability associated with vaccine administration has caused some health care professionals to stop administering vaccines. Complex rules for obtaining informed consent lengthened the time necessary to give shots. Dramatic increases in costs, coupled with the loss of health insurance, have caused many parents to choose between not immunizing their children and accessing the public sector. The public sector has responded admirably to the increased need for immunizations.

Public-Sector Provision of Services

Most state-purchased vaccines are administered in public health clinics that receive funds from TDH. Local and regional health departments have implemented special initiatives, flexible clinic hours, more efficient staffing patterns, and nonrestrictive eligibility policies that have resulted in more children being appropriately immunized.

Registries

During the summer of 1993, research was started to evaluate the requirements and potential impact of a statewide Immunization Tracking System (ITS). TDH utilized a competitive procurement process to select an information technology provider to develop this system, which was eventually named ImmTrac. ImmTrac enables TDH to track the immunizations administered to the children of Texas age 0 to 21, with a focus on children under 2 years of age. With this information, public and private providers will be able to notify parents of a child's pending or overdue immunizations, and target specific locations with special programs to increase the opportunities for children to receive the required immunizations. A voice response component will allow parents and providers to dial in by phone and retrieve their children's and patients' immunization records. The amount and method of funding for the development and maintenance costs associated with ImmTrac are shown in Figure 21.

House Bill 3054 was enacted by the legislature in 1997 and covered three significant issues: (1) Effective September 1, 1997, all records entered into and released from ImmTrac must have the written consent of the parent or guardian of the child. (2) Any provider of vaccine must report each shot administered to children whose parents or guardian have consented to be in the registry to TDH. If the provider is billing a payer for the immunization, it then becomes the payer's responsibility to provide the information to TDH. (3) Requirements became effective January 1, 1999. Finally, ImmTrac was the recipient of a Smithsonian Excellence Award in the category of public automation projects.

Enforcement and Surveillance

Texas has had immunization requirements for children and students attending child care facilities, schools, and institutions of higher education since 1971. The Texas Department of Health is authorized by statute to set and modify these requirements. Modifications may be made by the Texas Board of Health through the administrative rule process. Enforcement in public and

private schools is the responsibility of individual school districts or private school administrators; child care facilities and registered family homes are regulated by a state agency, the Texas Department of Protective and Regulatory Services (TDPRS), which licenses and inspects child care facilities. Texas law allows records to be inspected by health departments and permits schools to transfer records among themselves to facilitate student record keeping.

In the fall of each school year, all public and private schools complete a self-report of the immunization status of all their students. Schools that report levels below 95% for any antigen will be contacted by the state regional immunization program or local health department and offered technical assistance in improving immunization coverage. In addition, 10% of public school districts and 25% of private schools are audited each year. The number of student records reviewed is determined by the size of the school or district. These record reviews are conducted by TDH regional staff or local health departments and are a check on the accuracy of the self-reports.

Each year, all Head Start facilities and 25% of child care facilities and registered family homes are selected for record review (TDPRS reviews records at the remaining 75% of facilities). Regional TDH staff or local health department staff review the record of every child enrolled. A second review will be conducted if levels are below 95% for any antigen. If levels remain deficient after the second review, TDPRS is notified in writing. This agency has enforcement authority, up to and including license revocation. This does not occur unless the facility is in violation of additional operating standards.

Adult Immunizations

TDH operates an Adult Immunization Program with a 0.25 FTE funded by federal direct assistance and approximately \$1 million in vaccines purchased annually with state funds. Vaccines purchased with these state funds include hepatitis A, hepatitis B, influenza, pneumococcal, and tetanus–diphtheria.

Adult vaccines are promoted through collaboration with the Texas Medical Association, Texas Diabetes Council, and various grass-roots coalitions throughout the state. Vaccines are distributed to the public through TDH regional offices and LHD clinics.

During the recent legislative session, a law was enacted requiring nursing home facilities to offer influenza and pneumococcal vaccine to elderly residents. TDH and the Department of Human Services are working on the final wording of the rules to implement this legislation.

The TDH Immunization Division continues to monitor adult vaccination coverage levels by using the Texas Behavioral Risk Factor Surveillance System (BRFSS). The Texas BRFSS monitors influenza and pneumococcal vaccination coverage among persons older than 65 years of age and persons with diabetes of any age.

Current Status

The bottom line is these initiatives did have a positive impact on immunization rates (Figure 16). These rates are a significant improvement over the 30% rates that characterized the early 1990s. There has been a corresponding increase reflected in the number of doses administered (Figure 20). At the same time, this rate has stabilized in the 75% range, with the national and state goal being 90%. It is a realistic assumption that the attainment of the last 14–16% will be the most difficult component of national and state goals.

While registries continue to hold much promise, they will be expensive and their implementation may not be as expeditious as originally envisioned. ImmTrac is now an “opt-in” system rather than “opt-out.”

The Immunization Program in Texas has generally been funded well by both the state and the federal governments (Figure 9), but there has been a subtle shift recently. The role of the state in funding the infrastructure has steadily increased as the federal role has declined, particularly with regard to the Section 317 program. At the same time, the federal government has assumed an increasing role in the funding of vaccine purchases (Figures 22 and 23). Both are important in the operation of a successful program, and the participation of both federal and state programs are vital to adequate funding. Figure 24 may most accurately reflect the issues confronting Texas. It reflects the substantial increases for an ensuing 2-year period in the major funding sources reflected. As a point of reference, the increase Texas received in 1994 compares with the largest state funding Texas has ever received for the Immunization Program. It takes a state some time to transition to such major increases and to funnel the additional funding into existing and new service delivery systems in an effective and prudent manner; the existing systems have a healthy dose of skepticism; and therefore, the state appropriately utilizes the flexibility afforded by federal funding sources. This is the most prudent way to keep the system working while implementing strategic changes at the same time. Consistency of funding and some level of flexibility are essential in addressing the remaining 14–16% who need to be immunized in Texas. New vaccines will also continue to be developed and utilized as noted previously.

Texas is making some short-term adjustments in this regard that may or may not reflect the balance that is most desired, and some of these adjustments are noted below.

Program Priorities with Section 317 Adjustments

To address the reductions in Section 317 financial assistance in 1999, TDH has reduced the amount of funding available to support WIC on-site immunizations from \$2.4 million to \$1.0 million. Federal funding for direct service delivery contracts to local health departments was reduced by almost \$900,000. In order to avoid cuts that would have averaged 11% per contract, state funding was utilized to maintain existing funding levels.

Future

The Texas legislature has completed its 1999 legislative session and enacted several pieces of legislation that will impact the health care environment in Texas in the future. Indigent health legislation will shift the focus of health care delivery from acute care to primary and preventive care and restructure the method of state assistance to counties to provide greater incentives for county participation. Health and human service agencies underwent “sunset” review during the session, and the relationship between the Health and Human Services Commission and the operating agencies will continue to evolve and develop as HHSC has increased operational control. Under sunset legislation, TDH is charged with the responsibility of integrating the functions of its different health care delivery programs and conducting a comprehensive evaluation of its regulatory functions. TDH is also charged with the responsibility of developing a program to heighten awareness of hepatitis C.

Legislation was also enacted that places a moratorium on future implementation of Medicaid managed care until HHSC demonstrates that certain issues have been resolved. Public health services were defined by House Bill 1444, and grants were authorized for essential public health

services to be administered by TDH. Grants will be awarded to cities, counties, LHDs, and so forth. The legislation stipulates that grants must be distributed equally between urban and rural areas.

Utilizing funds made available by the Tobacco Settlement, the legislature also created permanent funds for (1) tobacco education and enforcement, (2) children and public health, (3) emergency medical services and trauma care, and (4) rural health facility capital improvement.

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