Texas Medicaid Diabetes Treatment and Prevention Report

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Executive Summary

S.B. 796, 82nd Legislature, Regular Session, 2011, requires the Texas Health and Human Services Commission (HHSC) to coordinate with the Texas Diabetes Council (TDC) to develop three reports on the prevention and treatment of diabetes in Texas.

Diabetes is a group of diseases marked by high levels of blood glucose resulting from defects in insulin production, insulin action, or both. According to the Texas Department of State Health Services (DSHS), as of 2010, 9.3 percent of the adult population in the U.S. was diagnosed with diabetes.[1] In Texas the percentage of adults living with diabetes for that same year was 9.7 percent, or approximately 1.8 million Texans.

This report addresses the first requirement of S.B. 796, a biennial report, to be submitted not later than December 1 of each even-numbered year that identifies HHSC's priorities for addressing diabetes within the Medicaid population.

The report further explains that the State of Texas submitted a section 1115 Demonstration proposal to Centers for Medicare & Medicaid Services (CMS) in July 2011 to expand managed care statewide and to provide a vehicle for leveraging savings to reimburse providers for uncompensated care costs and provide incentive payments to participating hospitals that implement and operate delivery system reforms. Incentive payments directed towards service delivery improvements and reforms may also be available for diabetes providers.

Informing each of the Medicaid Diabetes Priorities addressed in this report is a comprehensive set of performance and outcome measures. The movement of Texas Medicaid to managed care has coincided with the expansion and adoption of Medicaid performance and quality measures.

Texas Medicaid Diabetes Treatment and Prevention Priorities

1. Quality screening and treatment services to identify and treat patients with diabetes.

Prevention, timely diagnosis, and treatment are critical in patients with diabetes mellitus. Quality screening and treatment of the complications of diabetes mellitus have the potential to improve quality of life and increase life expectancy.[2]

Diabetes screenings and treatments are available for adults and children through Medicaid Fee-for-Service (FFS) and managed care organizations (MCOs) as medically indicated.

2. Pre-diabetes and diabetes disease self management education.

The overall objectives of diabetes self-management education (DSME) are to support informed decision-making, self-care behaviors, problem-solving and active collaboration with the health care team and to improve clinical outcomes, health status, and quality of life.[3]

Currently self-management education and other related services for children and eligible adult clients with diabetes are provided through regular physician/client consultation for clients enrolled in the Medicaid FFS program. MCOs must provide or arrange the provision of comprehensive Disease Management (DM)/Health Home Services (which includes patient self-management education) for individuals with chronic health conditions, including diabetes.

3. Gestational diabetes screenings.

Numerous national and international medical organizations, along with expert panels and working groups, have issued specific guidelines with recommendations for screening and diagnosing Gestational Diabetes Mellitus (GDM). Gestational diabetes screening is currently available through Pregnant Women's Medicaid, CHIP and Managed Care as medically necessary.

4. Dialogue with advisory bodies and external stakeholders to inform the development and improvement of Medicaid diabetes programming and benefits

HHSC is committed to providing individuals with pre-diabetes or diabetes in an effective and evidence-based manner that is responsive to their needs. HHSC will continue to work with parties interested in Texas Medicaid diabetes services, including TDC, in support of that goal.

Introduction

Senate Bill 796, 82nd Legislature, Regular Session, 2011, requires Texas Health and Human Services Commission (HHSC) to coordinate with the Texas Diabetes Council (TDC) to develop three reports on the prevention and treatment of diabetes in Texas. The three reports, taken together, will provide the legislature, relevant state agencies, and the general public with information regarding the impact of diabetes on the state while clarifying the present scope of services available statewide, both public and private. Ensuring this information is readily available will help the state and interested stakeholders identify potential areas of improvement for diabetes-related services.

The following report addresses the first requirement of S.B. 796, a biennial report to be submitted not later than December 1 of each even-numbered year that identifies HHSC's priorities for addressing diabetes within the Medicaid population.

Diabetes is a group of diseases marked by high levels of blood glucose resulting from defects in insulin production, insulin action, or both. This report provides four priorities for HHSC focused on the treatment and prevention of diabetes among Medicaid participants. Those priorities include the provision of: quality screening and treatment services to identify and treat patients with diabetes; pre-diabetes and diabetes disease self management education; and gestational diabetes screening as medically indicated. A final critical priority is for HHSC to continue to dialogue with advisory bodies and external stakeholders to inform the development and improvement of Medicaid diabetes programming and benefits.

These priorities and the efforts HHSC makes in support of them are detailed below.

Background

Diabetes: Types and Prevalence

Diabetes is a group of diseases marked by high levels of blood glucose resulting from defects in insulin production, insulin action, or both. According to DSHS, as of 2010, 9.3 percent of the adult population in the U.S. was diagnosed with diabetes.[1] In Texas, the percentage of adults living with diabetes for that same year was 9.7 percent, or approximately 1.8 million Texans.

Although diabetes is less prevalent among individuals younger than 20 years of age, its diagnosis among children, adolescents, and teens does occur. The Centers for Disease Control and Prevention (CDC) states that in 2010 about 215,000 young people in the U.S. were diagnosed with diabetes, or about 0.26 percent of that age group.[4]

Diabetes can lead to serious complications and premature death, but people with diabetes, working together with their support network and their health care providers, can take steps to control the disease and lower the risk of complications.

Type 1 Diabetes

Previously called insulin-dependent diabetes mellitus (IDDM) or juvenile-onset diabetes.

Type 1 diabetes develops when the body's immune system destroys pancreatic beta cells, the only cells in the body that make the hormone insulin that regulates blood glucose. To survive, people with type 1 diabetes must have insulin delivered by injection or a pump. This form of diabetes usually strikes children and young adults, although disease onset can occur at any age. In adults, type 1 diabetes accounts for approximately five percent of all diagnosed cases of diabetes. Risk factors for type 1 diabetes may be autoimmune, genetic, or environmental. There is no known way to prevent type 1 diabetes.

Type 2 Diabetes

Previously called non–insulin-dependent diabetes mellitus (NIDDM) or adult-onset diabetes.

In adults, type 2 diabetes accounts for about 90 to 95 percent of all diagnosed cases of diabetes. It usually begins as insulin resistance, a disorder in which the cells do not use insulin properly. As the need for insulin rises, the pancreas gradually loses its ability to produce it. Type 2 diabetes is associated with older age, obesity, family history of diabetes, history of gestational diabetes, impaired glucose metabolism, physical inactivity, and race/ethnicity. African Americans, Hispanic/Latino Americans, American Indians, and some Asian Americans and Native Hawaiians or other Pacific Islanders are at particularly high risk for type 2 diabetes and its complications. Type 2 diabetes in children and adolescents, although still rare, is being diagnosed more frequently among American Indians, African Americans, Hispanic/Latino Americans, and Asians/Pacific Islanders.[5]

Gestational diabetes

Gestational diabetes is diabetes that first occurs during pregnancy. When women are pregnant, their need for insulin appears to increase, and many can develop gestational diabetes during the late stages of pregnancy. Gestational diabetes occurs more frequently among African Americans, Hispanic/Latino Americans, and American Indians. It is also more common among obese women and women with a family history of diabetes. During pregnancy, gestational diabetes requires treatment to optimize maternal blood glucose levels to lessen the risk of complications in the infant.[6]

Prediabetes

Prediabetes is when a person's blood glucose levels are higher than normal but not high enough for a diagnosis of type 2 diabetes. Studies have shown that most people with prediabetes develop type 2 diabetes within 10 years, unless they lose 5 to 7 percent of

their body weight—about 10 to 15 pounds for someone who weighs 200 pounds—by making changes in their diet and level of physical activity.[7] People with prediabetes also are at increased risk of developing cardiovascular disease.

Texas Medicaid

Medicaid is a jointly funded state-federal health care program, established in Texas in 1967 and administered by HHSC. In December 2009, about one in eight Texans (3.2 million of the 24.9 million) relied on Medicaid for health insurance or long-term services and supports. Medicaid pays for acute health care (physician, inpatient, outpatient, pharmacy, lab, and X-ray services), and long-term services and supports (home and community-based services, nursing facility services, and services provided in ICFs/MR) for people ages 65 and older or who have disabilities. Medicaid serves primarily low-income families, non-disabled children, related caretakers of dependent children, pregnant women, people ages 65 and older, and people with disabilities.[8]

Medicaid Managed Care Expansion

The Texas Legislature, through the 2012-2013 General Appropriations Act, 82nd Legislature, Regular Session, 2011, and S.B. 7, 82nd Legislature, First Called Session, 2011, instructed HHSC to expand its use of Medicaid managed care to achieve program savings. The State of Texas submitted a section 1115 Demonstration proposal to the Centers for Medicare & Medicaid Services (CMS) in July 2011 to expand managed care statewide.

The tables below provide the number of individuals with Medicaid claims and primary diagnoses of diabetes. The FFS and Primary Care Case Management (PCCM) numbers includes clients with claims with Medicare as the primary payer while Medicaid pays any coinsurance. Because of the managed care expansion most Medicaid clients diagnosed with diabetes are now in managed care.

Table 1. Medicaid Expenditures for Diabetes[i] Related Claims, fiscal year 2010-2011 (FFS and PCCM)[ii]

	Eligibility FFS and PCCM clients only	Percentage of Clients with Claims	Number of Diabetes Clients	Number of Diabetes Claims	Amount Paid per Client	Amount Paid per Claim
FY2010						
Age < 21	2,550,641	0.2%	6,348	43,076	$1,538.10	$226.67
Age >= 21	1,201,933	17.4%	209,244	1,652,806	$438.48	$55.51
Total	**3,731,908**	5.8%	215,459	1,695,882	$471.15	$59.86
FY2011						
Age < 21	2,567,083	0.3%	6,428	46,299	$1,585.29	$220.10
Age >= 21	1,284,688	16.6%	213,090	1,599,892	$422.31	$56.25
Total	**3,828,800**	5.7%	219,375	1,646,191	$456.66	$60.86

[i] Diabetes Related Services is defined as claims with primary diagnosis of ICD-9-CM 250. Claim Types included are Physician, Outpatient and Inpatient Hospital. Crossover claims included. Crossover claims are those with Medicare as the primary payer and Medicaid pays coinsurance.

[ii] Data Source: FFS and PCCM data were selected from the Texas Medicaid and Health Partnership (TMHP) Ad Hoc Query Platform (AHQP) Claims Universe. Prepared By: Research Team, Strategic Decision Support, Texas Health and Human Services Commission, October, 2012.(WL)

Table 2. Medicaid Expenditures for Diabetes[iii] Related Encounters, fiscal year 2010-2011 (STAR and STAR Plus)[iv]

	Eligibility STAR/STAR Plus clients only	Percentage of clients with service	Number of Diabetes Clients	Encounters per client	Amount Paid per encounter[9]
FY2010					
STAR Age < 21	1,975,623	0.3 %	5,223	5.57	$227.96
STAR Age >= 21	210,418	1.9 %	4,007	4.08	$148.81
Total	**2,179,317**	**0.4 %**	**9,200**	**4.94**	**$199.50**
STAR Plus Age < 21	10,167	1.2 %	127	7.61	$122.24
STAR Plus Age >= 21	180,363	15.3 %	27,613	12.77	$280.35
Total	**190,147**	**14.6 %**	**27,732**	**12.75**	**$279.92**
FY2011					
STAR Age < 21	2,142,487	0.3 %	5,390	6.13	$229.27
STAR Age >= 21	224,715	2.4 %	5,408	2.06	$151.06
Total	**2,360,287**	**0.5 %**	**10,733**	**5.14**	**$198.02**
STAR Plus Age < 21	11,082	1.5 %	163	6.82	$147.06
STAR Plus Age >= 21	275,017	13.7 %	37,714	11.50	$270.67
Total	**285,605**	**13.3 %**	**37,867**	**11.48**	**$270.36**

The 1115 Demonstration waiver, in addition to being the vehicle to expand the managed care delivery system, also allowed for the state to operate a funding pool to reimburse providers for uncompensated care costs and to provide incentive payments to participating hospitals that implement and operate delivery system reforms. Incentive payments directed towards service delivery improvements and reforms may also be available for diabetes providers.

Medicaid Managed Care Quality Standards and Outcome Measures

Informing each of the Medicaid Diabetes priorities addressed in this report is a comprehensive set of performance and outcome measures. The movement of Texas Medicaid to managed care has coincided with the expansion and adoption of Medicaid

[iii] Diabetes Related Services is defined as encounters with primary diagnosis of ICD-9-CM 250.
[iv] Data Source: STAR and STAR Plus data were selected from Enc_Best Picture Universe, TMHP. Prepared By: Research Team, Strategic Decision Support, Texas Health and Human Services Commission, March, 2012. (WL)

performance and quality measures. The Medicaid performance measures and standards related to diabetes are listed below[10]. These measures are tracked by HHSC for each MCO by both program and service area.

Table 3 Medicaid Managed Care Medicaid Performance Measures and Standards Related to Diabetes

STAR Diabetes Performance Standards[v] for clients 18 years of age and older:

- Diabetes short-term complications admission rate standard is 56 per 100,000 members
- Diabetes long-term complications admission rated standard is 64 per 100,000 members
- Uncontrolled diabetes admission rate standard is 22 per 100,000 members.
- Rate of admission for lower extremity amputation among patients with uncontrolled diabetes is 7 per 100,000 members.

STAR and STAR+PLUS Diabetes Performance Standards for client 18 years of age and older:

	STAR	STAR+PLUS
• HbA1c tested standard	77%[vi]	77%
• Poor HbA1c control standard	48%	48%
• Diabetic eye exam standard	50%	50%
• LDL-C screened standard	71%	71%
• LDL-C controlled standard	37%	37%
• Nephropathy monitored	74 %	81%

Managed Care Contractual Incentives and Disincentives

The Uniform Managed Care Contract promotes health plan adherence to the measures through means that include financial incentives and disincentives, based on plan performance. The incentive mechanisms underlying managed care quality assurance are given below:

"Performance-Based Capitation Rate (5 percent-at-risk)"

HHSC places each MCO at risk for 5 percent of their annual capitation payments. At the end of each 12-month reporting period, each MCO must demonstrate that it has fully met the above diabetes (and other) performance expectations. If an MCO fails to meet

[v] **Admission Rate Standard** refers to the number of admissions per 1,000 member months or 100,000 members. As an example, it could refer to outpatient care, which would be the rate of outpatient visits per 1,000 member months. These are utilization measures.

[vi] **The simple percentages** given refer to the percent of members receiving a service. The standards in the dashboard are the performance benchmarks that HHSC sets for the MCOs. This is typically a measure of access to and quality of care.

expectations, HHSC adjusts future capitation payments. It is HHSC objective that all MCOs achieve expected quality outcomes.

"Quality Challenge Award"

If one or more of the MCOs is unable to earn the full amount of the "at-risk" portion of their capitation, HHSC awards part of their "at-risk" portion to those MCOs that demonstrate superior clinical quality as it relates to diabetes and other performance indicators. Quality Challenge Award payments are made to those MCOs.

HHSC ties certain of the performance measures listed in Table 3 to the above quality assurance measures. The specific diabetes quality indicators addressed through this incentive structure are:

Pediatric Quality Indicators for Children (less than 18 years of age)
- Diabetes Short-Term Complications

Quality Indicators for Children (18 years of age or older)
- Diabetes Short-Term Complications
- Diabetes Long-Term Complications
- Uncontrolled Diabetes
- Rate of Lower Extremity Amputation among Patients with Diabetes

Quality Indicators for All Ages
- Diabetic Eye Exams

Texas Medicaid Diabetes Treatment and Prevention Priorities

I. Quality screening and treatment services to identify and treat patients with diabetes.

Prevention, timely diagnosis, and treatment are critical in patients with diabetes mellitus. Many of the complications associated with diabetes, such as nephropathy, retinopathy, neuropathy, cardiovascular disease, stroke, and death, can be delayed or prevented with appropriate treatment of elevated blood pressure, lipids, and blood glucose. Quality screening and treatment of the complications of diabetes mellitus have the potential to improve quality of life and increase life expectancy.[2]

Diabetes Screening and Treatment in Texas Medicaid

Diabetes screenings and treatments are available for adults and children through Medicaid Fee-for-Service (FFS) and Managed Care Health Plans as medically indicated.

Currently Medicaid FFS provides the following benefits related to diabetes:

- labs for diagnosis and monitoring of diabetes
- diabetes equipment and supplies for monitoring and treatment
- continuous glucose monitoring

Medicaid MCOs are responsible for providing all services and benefits available to Medicaid FFS clients to the MCO's Medicaid members, with the exception of non-capitated services (non-capitated services are those services that are unavailable through a managed care client's health plan, but are available for that client as FFS).[11] Medicaid MCOs must provide the services and benefits described in the most recent **Texas Medicaid Provider Procedures Manual** and in updates to the Manual provided through **Texas Medicaid Bulletins**.[12]

II. Pre-diabetes and diabetes disease self management education.

As stated by the American Diabetes Association (ADA), diabetes self-management education (DSME) is the ongoing process of facilitating the knowledge, skill, and ability necessary for diabetes self-care. This process incorporates the needs, goals, and life experiences of the person with diabetes and is guided by evidence-based standards. The overall objectives of DSME are to support informed decision-making, self-care behaviors, problem-solving and active collaboration with the health care team and to improve clinical outcomes, health status, and quality of life.[3]

Pre-Diabetes, Diabetes Disease Self-Management Education and Texas Medicaid

Currently self management education and other related services for children and eligible adult clients with diabetes are provided through regular physician/client consultation for clients enrolled in the Medicaid FFS program.

MCOs must provide or arrange the provision of comprehensive Disease Management (DM)/Health Home Services (which includes patient self-management education). The MCOs must develop and implement DM/Health Home Services for members with chronic conditions that are often prevalent among MCO program members. Eligible chronic conditions include, but are not limited to: a mental health condition; substance use disorder; asthma; diabetes; heart disease; and being overweight, as evidenced by having a Body Mass Index (BMI) over 25.

III. Gestational diabetes screenings.

Numerous national and international medical organizations, along with expert panels and working groups, have issued specific guidelines with recommendations for screening and diagnosing Gestational Diabetes Mellitus (GDM). In 2001, the American College of Obstetricians and Gynecologists recommended that all pregnant women should be screened for GDM, whether by patient history, clinical risk factors, or laboratory testing. The U.S. Preventive Services Task Force concluded in 2008 that current evidence was insufficient to establish the balance of benefits and harms for screening for GDM.[13]

Gestation Diabetes Screenings and Texas Medicaid

Gestational diabetes screening is currently available through Pregnant Women's Medicaid, CHIP, and Managed Care as medically necessary.

IV. Dialogue with advisory bodies and external stakeholders to inform the development and improvement of Medicaid diabetes programming and benefits

HHSC has worked with the TDC and other stakeholders in the development of this report. HHSC is committed to providing individuals with pre-diabetes or diabetes in an effective and evidence-based manner that is responsive to their needs. Stakeholder involvement is critical to that goal and HHSC will continue to incorporate stakeholder feedback into its diabetes policies whenever possible.

Conclusion

S.B. 796, 82nd Legislature, Regular Session, 2011, requires HHSC to coordinate with the TDC to develop three reports on the prevention and treatment of diabetes in Texas. This report provides four priorities for HHSC focused on the treatment and prevention of diabetes among Medicaid participants. Those priorities include the provision of: quality screening and treatment services to identify and treat patients with diabetes; pre-diabetes and diabetes disease self management education; and gestational diabetes screening as medically indicated. A final critical priority is for HHSC to continue to dialogue with advisory bodies and external stakeholders to inform the development and improvement of Medicaid diabetes programming and benefits. Ensuring the information provided by this report and the two other reports required by S.B. 796 is readily available will help the

state and interested stakeholders identify potential areas of improvement for diabetes-related services.

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[1] *Diabetes Status in Texas, 2012.* Texas Diabetes Prevention and Control Program**.** Retrieved July 25, 2012 from: http://www.dshs.state.tx.us/diabetes/PDF/data/2010diabetesprev.pdf

[2] *Diabetes Mellitus: Diagnosis and Screening* Patel, P., MD, and Macerollo, A., MD. American Family Physician. 2010 Apr 1; 81(7): 863-870. Retrieved July 20, 2012 from: http://www.aafp.org/afp/2010/0401/p863.html

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[6] National Diabetes Factsheet, 2011. CDC. Retrieved July 25, 2012 from: http://www.cdc.gov/diabetes/pubs/pdf/ndfs_2011.pdf

[7] National Diabetes Prevention Program, 2012. CDC. Retrieved July 31, 2012 from: http://www.cdc.gov/diabetes/prevention/factsheet.htm

[8] Texas Medicaid and CHIP in Perspective, 8th Edition, HHSC. Retrieved July 25, 2012 from: http://www.hhsc.state.tx.us/medicaid/reports/PB8/PDF/Chp-1.pdf

[9] Health Maintenance Organizations participating in Medicaid Managed Care in Texas are paid on a capitation basis, and not on a fee-for-service basis. Therefore, any dollar amounts provided for Managed Care are estimates only.

[10] Uniform Managed Care Contract Terms and Conditions, Version 2.3, Chapter 10.1.7. Retrieved October 16th at: http://www.hhsc.state.tx.us/medicaid/umcm/Chp10/10_1_7.pdf

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