Texas Medicaid Diabetes Screenings and Self-Management Education: Progress, Recommendations and Coordination with the Texas Diabetes Council

As Required By
The 2016-2017 General Appropriations Act, H.B. 1, 84th Legislature, Regular Session, 2015 (Article II, Health and Human Services Commission, Rider 84)

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1. Executive Summary

The 2016-2017 General Appropriations Act, House Bill 1 (H.B. 1), 84th Legislature, Regular Session, 2015 (Article II, Health and Human Services Commission, Rider 84) directed the Texas Health and Human Services Commission (HHSC) to "identify efficiencies across agencies to integrate systems of care and work jointly with the Texas Diabetes Council (TDC) to: 1) improve screening rates for Medicaid patients at risk for diabetes; and 2) increase enrollment in diabetes self-management education (DSME) programs for those Medicaid patients diagnosed with diabetes."

Research shows strong connections between being at risk for diabetes, having a condition known as prediabetes, and the development of type 2 diabetes. Prediabetes is when a person's blood glucose (sugar) levels are higher than normal but not high enough for a diagnosis of type 2 diabetes. Average blood glucose levels are measured by a test called the A1c. A person with prediabetes has an A1c between 5.7 percent to 6.4 percent (a normal A1c is less than 5.7 percent). A person is diagnosed with diabetes when he or she has an A1c of 6.5 percent or higher.

Studies have shown 15 to 30 percent of people with prediabetes will develop type 2 diabetes within five years, unless they lose five to seven 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. The Texas Department of State Health Services (DSHS) reports that one in three Texans are obese and two in three are overweight. Overall, it is estimated that 7.1 million Texans are prediabetic.

It is estimated one-third of people with diabetes are unaware of their condition so screening for early diagnosis is essential. The earlier diabetes is diagnosed, the better the chance of decreasing the risk of developing diabetes complications, treating it effectively, and helping the person stay healthy. DSME teaches patients how to maintain close to normal blood sugar, which has been demonstrated to reduce eye disease by 76 percent, kidney disease by 50 percent, and heart disease by 40 percent.

According to the American Diabetes Association (ADA), the total estimated cost of diagnosed diabetes in the United States (U.S.) in 2012 was $245 billion, including $176 billion in direct medical costs and $69 billion in reduced productivity. People with diagnosed diabetes incur average medical expenditures of about $13,700 per year, of which about $7,900 is attributed to diabetes. People with diagnosed diabetes, on average, have medical expenditures approximately 2.3 times higher than what expenditures would be in the absence of diabetes. Care for people with diagnosed diabetes accounts for more than one in five health care dollars in the U.S., and more than half of that expenditure is directly attributable to diabetes.[1]

According to DSHS, as of 2012, 2.5 million Texans had diabetes, 457,819 of which were estimated to be undiagnosed. In Texas the percentage of adults living with diabetes for that same

[1] *The Cost of Diabetes.* ADA. Accessed June 2016 at: http://www.diabetes.org/advocacy/news-events/cost-of-diabetes.html?referrer=https://www.google.com/

year was 10.6 percent. Data from DSHS and the Centers for Disease Control and Prevention (CDC) indicate the prevalence of diabetes in Texas increased almost 50 percent from 2002 to 2012. The number of children and adolescents developing type 2 diabetes is also increasing at an alarming rate: in 2009, approximately 5,089 youth in the U.S. had a diagnosis of type 2 diabetes; three years later, approximately 208,000 youth in the U.S. were diagnosed with type 2 diabetes.[2]

In 2014, HHSC released "Reporting on Gestational Diabetes in Medicaid," documenting only between 40 to 50 percent of women participating in the Medicaid program or Children's Health Insurance Program Perinatal (CHIP-P) in Texas were screened for gestational diabetes during fiscal year 2012. Women with gestational diabetes are at a high risk for developing type 2 diabetes later in life, and the infant is at risk of becoming obese during childhood and developing type 2 diabetes as an adult. Women with gestational diabetes have a 35-60 percent chance of developing diabetes in the following 10 to 20 years.

In Texas, Medicaid pays for over 50 percent of all births statewide. A 2014 data analysis study by HHSC and TDC concluded nine percent of all pregnant women in the Texas Medicaid program were diagnosed with gestational diabetes in 2012.[3] Based on the findings from this study, it appears birth certificate and hospital discharge data may underestimate the prevalence of gestational diabetes by as much as 50 percent.

Type 2 and gestational diabetes can be delayed or prevented in people at risk of developing diabetes. People with prediabetes are at increased risk of cardiovascular disease. Most people with prediabetes develop type 2 diabetes within two to ten years, unless they modify their lifestyle. Once diagnosed, diabetes can be effectively self-managed to keep people out of emergency rooms and hospitals.

The TDC set strategic priorities to address the epidemic of diabetes and issued a call to action in 2014. Among the priority areas identified were these proven and cost effective interventions: DSME and improved screening rates to identify those with prediabetes or diabetes. The National Standards for Diabetes Self-Management Education and Support (the Standards)[4] report that DSME is effective but does not guarantee a lifetime improvement in self-care. To sustain a level of self-management required to effectively manage prediabetes and diabetes long-term, most individuals need ongoing diabetes self-management and support (DSMS).

In 2015, the U.S. Preventive Services Task Force (USPSTF) recommended screening for abnormal blood glucose as part of cardiovascular risk assessment in adults aged 40 to 70 years who are overweight or obese. The USPSTF further recommends clinicians refer patients with abnormal blood glucose to intensive behavioral counseling interventions to promote a healthful

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[2] *The Cost of Diabetes.* ADA. Accessed June 2016 at: http://www.diabetes.org/advocacy/news-events/cost-of-diabetes.html?referrer=https://www.google.com

[3] *Gestational Diabetes Medicaid: Prevalence, Outcomes, and Costs*, HHSC. Accessed October 2016 at: https://hhs.texas.gov/sites/hhs/files//sb1-gestational-diabetes.pdf

[4] *Diabetes Care*. Jan. 2014, vol. 37, supplement 1, p. 5. Accessed August 2016 at: http://care.diabetesjournals.org/content/diacare/37/Supplement_1/S14.full.pdf

diet and physical activity. This recommendation is the result of new, strong evidence for the effectiveness of lifestyle interventions in delaying or preventing the onset of diabetes. Referral to intensive behavioral interventions is key; screening for abnormal glucose identifies patients in need of lifestyle interventions. Part of the task force's intent is to get physicians (and others) to think about lifestyle intervention more and to make effective lifestyle programs more available. Of note, Northwestern University[5] found the current USPSTF screening criteria detects approximately 50 percent of those with undiagnosed prediabetes but identifies proportionately fewer racial/ethnic minorities than whites. This is problematic due to the increasing prevalence of prediabetes and diabetes at younger ages or at normal body weights, particularly among some racial/ethnic groups (such as African Americans and Hispanics).

Diabetes Screening and Treatment in Texas Medicaid

Diabetes screenings and treatments are available for adults and children as medically indicated through Medicaid fee-for-service (FFS) and managed care. Currently Medicaid provides the following benefits related to diabetes: labs for diagnosis and monitoring of diabetes, diabetes equipment and supplies for monitoring and treatment, and continuous glucose monitoring.

Texas Medicaid has transitioned most of its clients into managed care. Managed care organizations (MCOs) are responsible for providing Medicaid services and benefits including diabetes-related services required under the Medicaid state plan to their members. Medicaid MCOs must provide services in the same amount, duration, and scope as is available in FFS. Medical policies are described in the most recent Texas Medicaid Provider Procedures Manual (TMPPM). MCOs under contract with Texas Medicaid are required to provide disease management and education services for patients diagnosed with diabetes. Initial surveys of MCOs indicate that while all MCOs have DSME programs, fewer than half of the contracted MCOs automatically enroll patients into DSME programs upon identification of an individual with diabetes.

Patients with diabetes are eligible to receive both telemedicine (physician-directed) and telehealth (non-physician directed) services. There are neither diagnosis nor condition restrictions for telemedicine or telehealth services, which are health care or medical services provided remotely using electronic telecommunications. People with diabetes also qualify for tele-monitoring services. Tele-monitoring services, by statute[6], are limited to certain diagnoses and conditions, including diabetes. Tele-monitoring services involve transmitting clinical data to a hospital or home health agency for daily review. A physician provides weekly review of the clinical data. Tele-monitoring allows for quick intervention in disease exacerbations.

Texas Medicaid provides coverage for prediabetes and diabetes DSME. Texas Medicaid covers comprehensive preventive care including behavioral counseling in primary care to promote a

[5] O'Brien MJ, Lee JY, Carnethon MR, Ackermann RT, Vargas MC, Hamilton A, et al. Detecting Dysglycemia Using the 2015 United States Preventive Services Task Force Screening Criteria: A cohort Analysis of Community Health Center Patients. PLOS Medicine. 2016. Accessed July 2016 at: http://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1002074

[6] Texas Government Code §531.02176 (Medicaid Services Provided Through Home Telemonitoring Services); §531.02176 (Expiration of Medicaid Reimbursement for Provision of Home Telemonitoring Services)

healthy diet, risk factor reduction, and screening for obesity with intensive counseling and interventions. Laboratory services and diagnostic screenings are also covered benefits, including glycosylated hemoglobin (A1c,) glucagon and glucagon tolerance test, and glucose and glucose tolerance test.

Group clinical visits for educational counseling are a Texas Medicaid benefit for clients with diabetes and pregnant clients. Group clinical education must include a nationally approved curriculum (such as the one available through the American Association of Diabetic Educators) and must promote self-management of the chronic disease (diabetes). Groups must contain a minimum of two clients and a maximum of 20 clients. Diabetes self-management education must address nutrition, exercise and physical activity, preventing acute and chronic complications, monitoring and medication.

As stated by the ADA, 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. Some studies identify "cost effectiveness[7]" as representing a good value for the money spent. "Cost savings" is defined as an intervention that costs less and improves outcomes relative to alternative treatment(s). Recent and current research support DSME as cost-effective. The American Institutes for Research (2013) cost analysis of diabetes prevention programs (DPPs) found that accountable care organizations (ACOs) will realize cost savings relative to the shared risk of incurring program costs. The federal government will also receive some benefits when individuals enroll in Medicare. The age of the individual is significant as it affects who achieves savings in cost analyses, assuming individuals receive their health care through Medicare after age 65. However, many of the same MCOs serving Medicaid clients are now serving Medicare clients through Medicare Advantage programs, which may provide additional incentive to provide DPP and DSME services.

Currently self-management education and other related services for children and eligible adult clients with diabetes are provided through regular physician consultation for clients enrolled in the Medicaid FFS program and by the MCOs as a required program. Eligible adults with diabetes may choose to be referred to group clinical visits for educational counseling by a qualified health professional (e.g., a diabetes educator) in disease management. Children served by Medicaid are eligible for any health-care service that is medically necessary and for which federal financial participation (FFP) is available.

Purpose of Report

This report provides for the Legislature and Governor current Texas Medicaid efforts related to diabetes, particularly quality monitoring of screenings and DSME, and recommendations to find

[7] Sherman S, Pande N, Moon M, Lucado J, McSorley E, Nguyen QN. Diabetes Prevention Services: Cost Savings and the Role of Incentives. American Institutes for Research. 2013. Accessed July 2016 at: http://www.air.org/sites/default/files/downloads/report/Diabetes_Prevention_Services_0.pdf

fiscally-neutral or cost-saving methods to improve the health education and outcomes of persons with diabetes enrolled in Medicaid. The report reviews current quality monitoring and program benefits related to diabetes and makes specific proposals for working with TDC to find new mechanisms to ensure clients with diabetes who are enrolled in MCOs are getting evidence-based and cost-effective services that improve outcomes.

Recommendations

1) The joint Texas Medicaid-TDC Diabetes/DSME Quality and Program Improvement workgroup, developed in accordance with Rider 84, is developing specific proposals to improve Medicaid managed care diabetes screening, self-management education and quality metrics. This proposal is explained in more detail later in this report.

2) Medicaid staff are participating in the Diabetes Prevention and Management Affinity Group. The Centers for Medicare & Medicaid Services (CMS) created the Diabetes Prevention and Management Affinity Group for state Medicaid agencies to learn from one another and receive technical assistance in improving access to, utilization of, and quality of preventive services to improve diabetes prevention and control. Medicaid staff will participate in this Diabetes Prevention and Management Affinity Group to share lessons learned with other states and CMS regarding diabetes treatment and prevention. The best practices, tools, data, and other resources resulting from Texas participation in the group will be applied in Texas, as appropriate.

2. Introduction

The 2016-2017 General Appropriations Act, House Bill (H.B. 1), 84th Legislature, Regular Session, 2015 (Article II, HHSC, Rider 84) directed HHSC to "identify efficiencies across agencies to integrate systems of care and work jointly with the Texas Diabetes Council (TDC) to: 1) improve screening rates for Medicaid patients at risk for diabetes; and 2) increase enrollment in DSME programs for those Medicaid patients diagnosed with diabetes." Any results, limitations, improvements and recommendations related to those two topics are to be included in a report developed in consultation with TDC and then submitted to the Legislature and Governor.

The purpose of this report is to address progress made by HHSC in improving diabetes treatment and coordination and to provide recommendations as to how this progress can be continued in a manner that ensures TDC is involved in the development of evidence-based programs, managed care performance metrics and provider education.

3. Background

TDC, established under Chapter 103, Health and Safety Code, is a health promotion and advisory body to the Texas Legislature concerning education and health care for persons with diabetes. TDC members include physicians, nurses, dieticians, policy experts, members of relevant professional associations, advocacy groups, and interested members of the public. Four new members were recently appointed to the TDC, including TDC Chair Kathy Ann LaCivita, M.D. Dr. LaCivita also serves as medical director and endocrinologist at the Texas Diabetes Institute and is an adjunct professor at The University of Texas Health Science Center at San Antonio. TDC is supported by staff from DSHS, and certain representatives of state agencies, including HHSC, also participate in a non-voting capacity.

This report includes general information about diabetes in Texas, information about the treatment of diabetes in Texas Medicaid, and recommendations that include a proposed workgroup. In accordance with Rider 84, the workgroup will jointly include TDC and HHSC and will develop specific proposals to improve Medicaid managed care diabetes treatment, education, and quality metrics. Agency leadership will consider these proposals for implementation or adoption to the extent allowable by state and federal laws and regulations and agency resources.

Background on Diabetes

Diabetes is a group of diseases marked by high levels of blood glucose (sugar) resulting from defects in insulin production, insulin action, or both. According to DSHS, as of 2012, 2.5 million Texans have diabetes; 457,819 of which were estimated to be undiagnosed.[8] In Texas the percentage of adults living with diabetes for that same year was 10.6 percent. Data from DSHS

[8] Texas Behavioral Risk Factor Surveillance System, Center for Health Statistics, DSHS (* Undiagnosed-diabetes estimate based on 2003-2006 NHANES age-adjusted prevalence estimate of 2.5percent for persons twenty years of age and older).

and the CDC indicate that the prevalence of diabetes in Texas increased almost 50 percent from 2002 to 2012.

Although diabetes is less prevalent among individuals younger than 20 years of age, its diagnosis among children, adolescents, and teens is occurring more frequently. The CDC stated in 2012 approximately 208,000 young people in the U.S. were diagnosed with diabetes, or about 0.25 percent of that age group.[9] Diabetes can lead to serious complications and premature death. However, people with diabetes, working together with their support network and health care providers, can take steps to control the disease and lower the risk of complications.

Prediabetes

Prediabetes was formerly called borderline diabetes. Prediabetes is when a person's blood glucose levels are higher than normal but not high enough for a diagnosis of type 2 diabetes. People with prediabetes are at increased risk of developing cardiovascular disease. Studies have shown 15 to 30 percent of people with prediabetes will develop type 2 diabetes within five years, unless they lose five to seven 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.[10] DSHS reports that one in three Texans are obese, and two in three are overweight.[11] Overall, it is estimated 7.1 million Texans are prediabetic.

Type 1 Diabetes

Type 1 diabetes was formerly 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

Type 2 diabetes was formerly 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

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[9] *National Diabetes Statistics Report, 2014*. CDC. Accessed June 2016 at: http://www.cdc.gov/diabetes/pubs/statsreport14/national-diabetes-report-web.pdf

[10] Diabetes Home. CDC. Accessed June 2016 at: http://www.cdc.gov/diabetes/basics/prediabetes.html

[11] *Chronic Disease Prevention in Texas*, DSHS, February 2016. Accessed June 2016 at: http://www.dshs.texas.gov/legislative/2016-Reports/Chronic-Disease-Prevention-in-Texas-Presentation-1-15-16.doc

gestational diabetes, impaired glucose metabolism, physical inactivity, and race/ethnicity. African Americans, Hispanic Americans, Native Americans, and some Asian Americans and Native Hawaiians or other Pacific Islanders have higher rates of incidence of type 2 diabetes and its complications.

Unfortunately, type 2 diabetes is no longer an "adult-onset" disease. Along with climbing rates of obesity is an increasing number of children with type 2 diabetes. In a three-year timeframe, the incidence of type 2 diabetes increased more than 40 percent in America's youth.[12]

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 Americans, and Native Americans. It is also more common among women with a family history of diabetes and among obese women. Additionally, as a woman's pre-pregnancy weight increases, maternal care and post-natal expenses also increase. Regardless of diabetes status, obese women tend to have the highest maternal costs. DPPs and DSME address making changes in diet and level of physical activity to reduce total bodyweight by five to seven percent. During pregnancy, gestational diabetes requires treatment to optimize maternal blood glucose levels to lessen the risk of complications in the infant.[13]

An HHSC report, developed in consultation with TDC in 2014, found as many as nine percent of all pregnant women in Texas may develop gestational diabetes prior to delivery.[14] Women with gestational diabetes are more likely to experience a complication during delivery (21 percent) than are non-diabetic women (16 percent). Women who already have diabetes when they become pregnant are more than twice as likely (44 percent) to experience complications during delivery and are more likely to require a cesarean section (C-section). The financial costs of gestational diabetes were less clear. However, women enrolled in Medicaid who have diabetes prior to pregnancy cost the health care system about $12 million more than their non-diabetic counterparts.[12]

If the risk for gestational diabetes is identified before pregnancy, it may be prevented. For women who become eligible for Medicaid after becoming pregnant, gestational diabetes screening is done between 24 to 28 weeks of pregnancy, continuous blood glucose monitoring may be pre-authorized if medically necessary, and all women are provided educational materials and/or services. Women with high-risk pregnancies, including gestational or chronic diabetes,

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[12] *Statistics about Diabetes*. ADA. Accessed July 2016 at: http://www.diabetes.org/diabetes-basics/statistics/?referrer=https://www.google.com/

[13] 2014 *National Diabetes Report Card*. CDC. Accessed June 2016 at: http://www.cdc.gov/diabetes/pubs/pdf/ndfs_2011.pdf

[14] *Gestational Diabetes in Medicaid: Prevalence, Outcomes, and Costs*, HHSC. Accessed October 2016 at: https://hhs.texas.gov/sites/hhs/files//sb1-gestational-diabetes.pdf

are eligible for case management services, which include an individual care plan and at least one educational or status interaction each month with a nurse.

4. Texas Medicaid and Diabetes

Medicaid is a jointly funded state-federal health care program, established in Texas in 1967 and administered by HHSC. Medicaid covers low-income pregnant women, newborns and children through 18 years of age in low income households, newborns whose mothers are incarcerated in a Texas criminal justice facility, low income parents or caretaker relatives of dependent children who receive Medicaid, children in state conservatorship, certain former foster care youth, and adults and children with disabilities receiving Supplemental Security Income (SSI). Texas Medicaid also covers certain women under the age of 65 with breast or cervical cancer.

As of August 2015, just over four million Texans were enrolled in the Medicaid program.[15] Of the four million enrollees, three million are children (under age 18); 140,000 are pregnant women; and 950,000 are categorized as aged and Medicare recipients, persons with disabilities, or parents/caretakers.

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 intermediate care facilities for individuals with an intellectual disability or related condition (ICF/IID)). Depending on the specific program requirements, Medicaid primarily serves low-income families, children, related caretakers of dependent children, pregnant women, people ages 65 and older, and people with disabilities.[16] Approximately 3.74 million individuals in Medicaid will be enrolled in managed care by fall of 2016.

Appendix A: Medicaid Diabetes Demographics (SFY 2014) provides the number of individuals with Medicaid claims and primary diagnoses of diabetes (types 1 and 2) as 8,381 for inpatient hospital, 89,201 for outpatient hospital, and 234,474 for professional claims, including FFS and managed care.

Medicaid Managed Care Expansion

The Texas Legislature, through the 2012-2013 General Appropriations Act, H.B. 1, 82nd Legislature, Regular Session, 2011, and Senate Bill 7 (S.B. 7), 82nd Legislature, First Called Session, 2011,[17] instructed HHSC to expand its use of Medicaid managed care to achieve program savings and coordination-of-care benefits. Under an 1115 demonstration waiver project,

[15] Texas Medicaid Enrollment Statistics. HHSC. Accessed October 2016 at: https://hhs.texas.gov/texas-medicaid-enrollment-statistics

[16] *Texas Medicaid and CHIP in Perspective, 9th Edition, HHSC.* Accessed June 2016 at: http://www.hhsc.state.tx.us/medicaid/about/PB/PinkBook.pdf

[17] Senate Bill 7, 82nd Legislature, First Called Session, 2011. Accessed August 2016 at: http://www.capitol.state.tx.us/tlodocs/821/billtext/pdf/SB00007F.pdf#navpanes=0

the Transformation Waiver, approved by CMS, Texas implemented an expansion of managed care statewide. The Transformation Waiver also provided a vehicle for leveraging savings to reimburse providers for uncompensated care costs and provide incentive payments to health care providers who implement and operate delivery system reforms. A list of approved delivery system reform incentive payment (DSRIP) projects can be found here: https://hhs.texas.gov/laws-regulations/policies-and-rules/medicaid-1115-waiver/rhp-summary-information.

Texas Medicaid has continued to move clients into managed care, reflecting the broader trend occurring across the nation. For example, on November 1, 2016, children and adults 20 and younger with disabilities will be moving into the new STAR Kids program.

Diabetes Screening and Treatment

Diabetes screenings and treatments are available for adults and children as medically indicated through both Medicaid FFS and managed care. Medicaid MCOs must provide services in the same amount, duration, and scope as is available in FFS through the Medicaid State Plan. Medical policies are described in the most recent TMPPM. Currently Medicaid 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, and prediabetes and DSME.

As stated by the ADA, 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 to improve clinical outcomes, health status, and quality of life. Currently, 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 and by the MCOs as a required DSME program.

The Texas Medicaid Wellness Program replaced the Disease Management program mandated by Chapter 32 Texas Human Resources Code[18] and provides comprehensive care management services for children who are high-cost/high-risk FFS clients. The Wellness Program includes a diabetes self-management training (DSMT) component and offers ten hours of DSMT plus three hours of nutritional counseling to clients who have diabetes.

Other Diabetes-Related Policies and Initiatives

Diabetes Prevention and Management Affinity Group

As of February 2016, HHSC staff are participating in CMS' Diabetes Prevention and Management Affinity Group to share lessons learned regarding diabetes treatment and

[18] Human Resources Code § 32.057. Contracts for Disease Management Programs. Accessed August 2016 at: http://www.statutes.legis.state.tx.us/Docs/HR/htm/HR.32.htm

prevention. The focus of Texas Medicaid is learning from other states about the current best practices for MCO-managed DSME and related quality metrics.

Prior Authorization and Signature Requirements

Physicians ordering diabetic supplies use the Title XIX durable medical equipment (DME) physician order form. This form is two pages long and valid for six-months. The form also requires the treating physician's signature, and the original must be maintained by the dispensing provider. Providers have reported this form is an administrative burden.

HHSC continues to enforce the requirement that a physician signs any prescription for durable medical equipment, prosthetics, orthotics, and supplies (DMEPOS) suitable for use in the home because of the risk to federal financial participation in the Texas Medicaid program if HHSC does not comply with federal regulations[19], as interpreted by CMS. The physician must also provide information needed to ensure medical necessity.

In addition, Texas Medicaid allows the substitution of a detailed written order for the Title XIX form for the dispensation of diabetic equipment and supplies. The written order must contain the client's name, date of the order, description of items to be provided, quantity to dispense, and a diagnosis code or description supporting the medical necessity.

HHSC has developed a new online portal allowing electronic signatures that will significantly reduce the administrative burden associated with requesting authorizations for any services including diabetes supplies for individuals in FFS. Texas Medicaid and Healthcare Partnership (TMHP) will now accept e-signatures on all prior authorization requests and supporting documentation submitted to TMHP. Electronic signatures and FFS prior authorization requests for DMEPOS are now being accepted via TMHP prior authorization on the portal (PA on the portal), effective June 6, 2016. More information regarding PA on the portal can be found at this link: http://www.tmhp.com/Pages/Prior_Auth/Prior_Auth_home.aspx.

Thus, a dispensing physician can add the diagnosis to the prescription, which has all the patient identifiers and the orders for the diabetic supplies. The prescription now contains all of the information required for a written order, and diabetes supplies can be immediately fully authorized. While PA on the portal is only available for FFS, state legislation[20] allows all dispensing physicians (FFS and MCO) to submit a written order in lieu of a Title XIX form for diabetic supplies. HHSC is open to considering other recommendations related to administrative streamlining for diabetic supplies.

Pharmacy Initiatives

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[19] 42 Code of Federal Regulations (CFR) §440.70. Home health services. Accessed August 2016 at: https://www.gpo.gov/fdsys/pkg/CFR-2010-title42-vol4/pdf/CFR-2010-title42-vol4-sec440-70.pdf

[20] Texas Administrative Code (TAC) §21.2605. Diabetes Equipment and Supplies. Accessed October 2016 at: https://texreg.sos.state.tx.us/public/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=28&pt=1&ch=21&rl=2605

HHSC and its subcontractor conduct a yearly retrospective review performed as part of the drug utilization review (DUR) interventions. Medical claims and pharmacy claims are reviewed to target prescribing providers of Medicaid FFS diabetic patients. A letter is sent as part of an educational effort to prescribing providers that meet certain diabetes management indicators. The indicators are presented to the DUR Board for their review and recommendations. MCOs are required to have a retrospective DUR program as well. However, MCOs are not required to target providers or address outliers. Thus, each MCO and pharmacy benefit manager has their own DUR interventions. MCOs are required to report how many DUR activities they perform each month.

The Medicaid drug formulary currently includes diabetic insulin syringe with needle 1cc or less, diabetic insulin pens and pen needles, diabetic test trips, lancets, lancet devices, and diabetic monitor and disposable test strips kits. MCOs must follow the drug formulary.

5. Texas Medicaid and Managed Care

Quality Standards and Outcome Measures

HHSC uses a series of measures that identify key aspects of performance to support transparency and MCO accountability. These measures are tracked by HHSC for each MCO by both program and service area. There are five STAR+PLUS MCOs and 19 STAR MCOs serving 13 service areas. While HHSC does not currently have a measure for how many clients are being enrolled into DSME by their health plans, the following diabetes-related quality of care measures are tracked and reported:

- Agency for Healthcare Research and Quality (AHRQ) pediatric quality indicators (PDIs)
  - Diabetes short-term complications admission rate (PDI 15)
- AHRQ prevention quality indicators (PQIs)
  - Diabetes short-term complications admission rate (PQI 1)
  - Diabetes long-term complications admission rate (PQI 3)
  - Uncontrolled diabetes admission rate (PQI 14)
  - Rate of lower-extremity amputation among patients with diabetes (PQI 16)
- Healthcare effectiveness data and information set (HEDIS®) quality of care measures
  - Comprehensive diabetes care, submeasures A1c (a measure of blood sugar control) testing and A1c adequate control, run using hybrid methodology
  - Comprehensive diabetes care, submeasures eye exam and monitoring for nephropathy, run using administrative methodology

Additional information and findings related to these measures can be found at the following link: https://hhs.texas.gov/about-hhs/process-improvement/medicaid-and-chip-quality-and-efficiency-improvement/data-and-reports.

Pay-for-Quality Program

The managed care contracts include various mechanisms to motivate MCOs to focus on specific areas of plan performance, including financial incentives based on plan performance. The Pay-for-Quality Program provides financial incentives and disincentives to MCOs based on performance related to pre-specified quality goals. HHSC is in the process of revising the methodology for this program.

For the past two years, Pay-for-Quality has included a component of the HEDIS comprehensive diabetes measure for its STAR+PLUS population. STAR+PLUS is a Medicaid managed care program for people who have disabilities or are age 65 or older. Diabetes-related Pay-for-Quality measures for STAR+PLUS included the percentage of members 18 to 75 years of age with diabetes (type 1 and type 2) who had an A1c of less than eight (A1c <8).

STAR is a Medicaid managed care program primarily for children, newborns, and pregnant women. The STAR program has a measure for prenatal care and postpartum care, using the percentage of deliveries of live births between November 6 of the year prior to the measurement year and November 5 of the measurement year. The measure for prenatal care is the percentage of deliveries that received a prenatal care visit as a member of the MCO either in the first trimester or within 42 days of enrollment into the MCO. The measure for postpartum care is the percentage of deliveries that had a postpartum visit on or between 21 and 56 days after delivery.

Performance Improvement Projects

The Balanced Budget Act of 1997 requires state Medicaid agencies to provide an annual external independent review of quality outcomes, timeliness of services, and access to services provided by a Medicaid MCO and prepaid inpatient health plans. To comply with this requirement, and to provide HHSC with data analysis and information to effectively manage its Medicaid managed care programs, HHSC contracts with an external quality review organization (EQRO) for Medicaid managed care and CHIP. The EQRO recommends topics for performance improvement projects based on MCO performance results, quality measures by program, data from member surveys, administrative and encounter files, medical records, and the immunization registry. HHSC selects goals that align with quality-measure priorities, which become two-year projects that enable each MCO to target specific areas for improvement that will affect the greatest numbers of members. Each MCO has two projects for each program (e.g. STAR, STAR+PLUS) in which they participate. These projects are specified and measurable and reflect areas that present significant opportunities for performance improvement for each MCO.

Disease Management Programs

To ensure Medicaid MCOs are meeting all state and federal requirements related to providing care to Medicaid members, the EQRO conducts MCO administrative interviews and on-site visits to assess multiple domains, including MCO care coordination and disease management

programs. HHSC requires all MCOs participating in STAR and STAR+PLUS to provide disease management services to clients with diabetes.

MCOs are evaluated by the EQRO on components of their disease management programs through the EQRO administrative interview process. MCOs complete the administrative interview tool online and are required to provide supporting documentation. For example, when describing disease management programs, the MCO must provide copies of all evidenced-based guidelines used in providing care to members. The EQRO analyzes all responses and documents and generates follow-up questions for each MCO, which are administered during on-site visits and conference calls. The following are findings of a survey of MCOs on their DSME programs.

MCO DSME Survey Findings

- STAR is a Medicaid managed care program primarily for children, newborns, and pregnant women. People in STAR get their services through 18 health plans, also called MCOs.

  All 18 health plans reported using provider referrals, member/family referrals, and case management to identify members diagnosed with diabetes. A total of 17 health plans also used pharmacy data and claims data from provider encounters, hospital admissions, and emergency room visits. Additionally, 16 plans used health risk assessments. Most health plans reported identifying members with prediabetes similarly: 14 health plans reported using provider referrals and 15 health plans reported use of both member/family referrals and case management.

  The majority of health plans (17) serving people in STAR report using ADA guidelines to develop diabetes education for disease management programs. Thirteen health plans use guidelines or models from the National Committee on Quality Assurance (NCQA), and ten plans use National Institutes of Health guidelines. Eleven plans contact (by phone, mail, or e-mail) members with diabetes and inform them of the diabetes disease management program and the option to participate. Three plans automatically enroll members and members may opt-out if they choose. Four plans report using both of these methods to enroll members into diabetes disease management programs.

  All 18 health plans provide individual telephone counseling to members in disease management programs, and 17 plans provide publications (e.g., brochures) to members receiving disease management services. Nine plans provide face-to-face counseling to individual members and six plans provide diabetes education in group classes.

- STAR+PLUS is a Medicaid managed care program for people who have disabilities or are age 65 or older. People in STAR+PLUS get basic Medicaid medical services and long-term services and supports through five health plans. All five plans reported using health risk assessments to identify members with prediabetes. Four health plans also used member/family referrals and case management. All STAR+PLUS health plans use NCQA guidelines or models to develop diabetes education. Four plans also use ADA guidelines, and three use NIH guidelines in addition to NCQA guidelines. All five plans contact (by phone, mail, or e-mail) members with diabetes and inform them of the diabetes disease management

program and the option to participate. Two plans report they also automatically enroll members, but members may opt-out if they choose.

All STAR+PLUS health plans provide individual telephone counseling, as well as publications (e.g., brochures,) to members in diabetes disease management programs. All five plans have nurses provide diabetes disease management services to members. Two plans report using certified diabetes educators, nutritionists or dieticians, social workers and/or health educators.

6. Recommendations

Medicaid and the Texas Diabetes Council

Recommendation 1. Texas Medicaid-TDC Diabetes/DSME Quality and Program Improvement Workgroup

Expansion of managed care in Texas has increased the size of the toolkit the state Medicaid program can use to track and improve quality and care coordination. However, ensuring such programs continue to deliver needed care in an evidence-based and cost-efficient manner is an ongoing effort requiring participation of providers, health care and contracting experts, committed stakeholders, members of the public and the client community, and policy experts.

HHSC proposes TDC and HHSC develop a more formal, but flexible, structure in which TDC can directly communicate with relevant agency and MCO staff to identify and determine feasibility of specific proposals and move to development of a timeline for consideration by leadership and, if approved, final operationalization.

HHSC commits to working with TDC to create a structured and time-limited workgroup that is goal-focused and capable of creating or providing the information needed to develop a proposal for leadership consideration. Keeping the workgroup time-limited will ensure staff resources are used strategically and can move quickly to develop and implement proposed changes identified by the workgroup and approved by leadership. The workgroup will be comprised of state staff including HHSC Medicaid and DSHS staff, MCO staff, TDC representation, and other members recommended by the TDC to develop proposals for leadership decision on the topics provided below.

State agency staff will work with TDC to assist in providing research needed by the joint Texas Medicaid-TDC Diabetes/DSME Quality and Program Improvement workgroup, identify specific proposals for leadership consideration, identify and develop any contract changes needed, provide fiscal impacts as necessary, and develop rule or state plan changes as needed. The joint Texas Medicaid-TDC Diabetes/DSME Quality and Program Improvement workgroup may consider the following topic areas for consideration of approval for implementation by leadership:

- MCO DSME plans and quality outcomes data or metrics

    - Investigate quality of care measures for tracking and reporting the number of members enrolled into DSME
- MCO provider training requirements (e.g., concerning diabetes care and increased screening rates)
- Diabetes-related quality measures and MCO or provider incentives, for example:
    - Investigate establishing quality measure for diabetes screening and education in postpartum counseling as well as during prenatal care, as Medicaid provides services to a significant portion of pregnant women in Texas
- Other diabetes-related topic areas agreed to by the workgroup, TDC, and HHSC:
    - Identify potential options to simplify the DME process
    - Identify cost-neutral or cost-savings options to expand DPP, DSME, and nutrition counseling
        - Intensive, lifestyle intervention and continuing support is a best practice in chronic disease management.

Recommendation 2. Diabetes Prevention and Management Affinity Group

Medicaid staff will continue participating in the Diabetes Prevention and Management Affinity Group to share lessons learned regarding diabetes treatment and prevention. The focus of Texas Medicaid's participation is learning from other states current best practices for MCO-managed DSME and related quality metrics. Any information gained from the Diabetes Prevention and Management Affinity Group will help guide the joint Texas Medicaid-TDC Diabetes/DSME Quality and Program Improvement workgroup described above in recommendation number 1.

7. Conclusion

Rider 84 directed HHSC to "identify efficiencies across agencies to integrate systems of care and work jointly with the TDC to: 1) improve screening rates for Medicaid patients at risk for diabetes; and 2) increase enrollment in DSME programs for those Medicaid patients diagnosed with diabetes."

This report provides the Legislature and Governor information regarding current Texas Medicaid efforts related to diabetes, particularly quality monitoring of screenings and DSME, and recommendations to find cost-effective ways to improve the health education and outcomes of persons with diabetes enrolled in Medicaid. The report reviews current quality monitoring and program benefits related to diabetes and makes specific proposals for working with TDC to find new mechanisms to ensure clients with diabetes who are enrolled in MCOs are getting evidence-based and cost-efficient services that improve outcomes.

Acronyms and Definitions

Acronym	Full Name	Definition if applicable
A1c	Adult type hemoglobin with minor component 1c, which is bound to glucose (blood sugar)	Measures an individual's average blood sugar over the past 2-3 months. The higher one's A1c, the poorer one's control of blood sugar or glucose
AADE	American Association of Diabetic Educators	A multi-disciplinary professional membership organization dedicated to improving diabetes care
ACO	Accountable Care Organization	A network of providers and hospitals that share medical and financial responsibility for coordinating patient care
ADA	American Diabetes Association	An organization dedicated to preventing and curing diabetes and improving the lives of those affected by diabetes
AHRQ	Agency for Healthcare Research and Quality	Works within the U.S. DHHS and with others to produce evidence and ensure the evidence is used to make health care better, safer, accessible, equitable and affordable
AIR	American Institutes for Research	A nonprofit dedicated to conducting and applying the best research and evaluation towards improving people's lives, especially the disadvantaged
CCP	Comprehensive Care Program	Expanded benefits portion of THSteps that provides any necessary health care Service covered by Medicaid
CDC	Centers for Disease	Federal health protection agency
CFR	Code of Federal Regulations	Codified federal law; includes Medicaid program requirements
CHIP	Children's Health Insurance Program	Provides low-cost or free health coverage to financially-eligible children

Acronym	Full Name	Definition if applicable
CHIPRA	CHIP Reauthorization Act	Federal legislation providing states with new funding, incentives and program options to identify and enroll uninsured children and measure the quality of care these children then receive
CMS	Centers for Medicare and Medicaid Services	Part of the U.S. DHHS; administers the Health Insurance Marketplace, CHIP, Medicare and Medicaid
DHHS	Department of Health and Human Services	A federal agency dedicated to protecting and enhancing the health and well-being of all Americans
Diabetes	**Definition:** A group of diseases marked by high levels of blood glucose resulting from defects in insulin production, insulin action or both	
Diabetes, Gestational	**Definition:** Diabetes that first occurs during a woman's pregnancy	
Diabetes, Pre	**Definition:** A condition of higher than normal blood sugar; an A1c level between 5.7 percent and 6.4 percent	
Diabetes, Type 1	**Definition:** A condition caused by the body's immune system destroying pancreatic beta cells - the only cells in the body that make insulin, the hormone that regulates blood glucose (blood sugar)	
Diabetes, Type 2	**Definition:** A condition that develops when a body's cells are no longer able to use insulin properly. As the need for insulin rises, the pancreas gradually loses its ability to produce insulin; an A1c level greater than 6.4 percent	
Diabetes Prevention and Management Affinity Group	**Definition:** Created by CMS for state Medicaid agencies to learn from one another and receive technical assistance to enhance access to, utilization of, and the quality of preventive services to improve diabetes prevention and control	
DME	Durable Medical Equipment	Includes items such as insulin pumps, lancets, and lancet devices
DMEPOS	Durable Medical Equipment, Prosthetics, Orthotics and Supplies	

Acronym	Full Name	Definition if applicable
DSHS	Department of State Health Services	
DSME	Diabetes Self-Management Education	An ongoing process of facilitating knowledge, skills and abilities for pre-diabetes and diabetes self-care
DSMS	Diabetes Self-Management Support	Activities beyond formal self-management training that assist an individual in implementing and sustaining behaviors needed to manage diabetes
DSMT	Diabetes Self-Management Training (see DSME)	
DSRIP	Delivery System Reform Incentive Programs	
DUR	Drug Utilization Review	A program or process to promote appropriate use of pharmaceuticals
EPSDT	Early and Periodic Screening, Diagnosis and Treatment	A Medicaid program providing comprehensive and preventive children's health services
EQRO	External Quality Review Organization	Evaluates quality, timeliness and accessibility of health care
FFP	Federal Financial Participation	Joint funding of Texas Medicaid by the federal government
FFS	Fee-for-Service	Also known as "traditional" Medicaid, in which providers bill for each service rendered
HEDIS	Healthcare Effectiveness Data and Information Set	A tool used by over 90 percent of health plans in the U.S. to measure health care and service performance
HHSC	Health and Human Services Commission	Administers health and human services in Texas (e.g., Medicaid) with the highest standards for both customer service and fiscal accountability

Acronym	Full Name	Definition if applicable
LDL	Low Density Lipoprotein	Contributes to plaque, which can narrow or clog arteries
LDL-C	LDL-Cholesterol	Also knowns as "bad" cholesterol
MCO	Managed Care Organization	Offers managed care health plans by contracting with health care providers and medical facilities to deliver care to members at reduced costs
National Standards for Diabetes Self-Management Education and Support	**Definition:** Also called "the Standards;" designed to define quality DSME and to support diabetes educators in providing evidenced-based education and self-management support to individuals with diabetes	
NCQA	National Committee on Quality Assurance	A nonprofit health care accreditation organization
NIH	National Institutes of Health	Part of the U.S. DHHS and an internationally recognized medical research center
PA	Prior Authorization	Requires a physician to obtain approval from the health insurance plan to prescribe certain medications, services, or equipment
PDI	Pediatric Quality Indicators	Abbreviated "PDI" to avoid confusion with Prevention Quality Indicators
QOC	Quality of Care	Quality assurance in health care, including strategic decision-making (getting the right kind of care at the right time)
Rider 84	**Definition:** refers to Texas legislation that calls for HHSC and TDC to work jointly to improve screening rates in Medicaid clients at risk for diabetes and to increase enrollment in DSME programs for Medicaid clients diagnosed with diabetes	
SFY	State Fiscal Year	Begins September 1 and goes through 8/31 of the following year (e.g. SFY 2015 is 9/1/14 - 8/31/15)

Acronym	Full Name	Definition if applicable
TAC	Texas Administrative Code	A compilation of all Texas state agency rules
TDC	Texas Diabetes Council	A health promotion and advisory body to the Texas Legislature
Telehealth	**Definition:** a health service (other than telemedicine) delivered by a health profession via technology (e.g., digital interactive video)	
Telemedicine	**Definition:** health care by a licensed physician to assess, diagnose or treat a patient via advanced telecommunications technology (e.g., digital interactive video)	
Telemonitoring	**Definition:** the use of advanced telecommunications technology (e.g. clinical data transmission) to monitor a patient's condition from a distance	
THSteps	Texas Health Steps	Texas Medicaid's EPSDT program
TMHP	Texas Medicaid Healthcare Partnership	
TMPPM	Texas Medicaid Provider Procedures Manual	Contains information about Medicaid FFS benefits, policies and limitations
TWHP	Texas Women's Health Program	Provides low-income women with family planning exams, related health screenings, and birth control
USPSTF	United States Preventive Services Task Force	Also called the "Task Force;" an independent, volunteer panel of national experts in prevention and evidenced-based medicine that makes recommendations for clinical services based on rigorous analysis of peer-reviewed evidence

Appendix A: Medicaid Diabetes Demographics (SFY 2014)

Table 1. Medicaid Diabetes Demographics (Fiscal Year 2014)

Demographic	Inpatient Hospital		Outpatient Hospital		Professional Claims	
	# Clients	% Clients	# Clients	% Clients	# Clients	% Clients
Sex						
Female	4,568	54.5%	57,627	64.7%	153,332	65.4%
Male	3,766	44.9%	31,209	35.1%	80,844	34.5%
Unknown	53	0.6%	314	0.4%	717	0.3%
Race						
White	1,890	22.6%	21,899	24.6%	58,827	25.1%
Black	1,606	19.2%	14,512	16.3%	37,819	16.1%
Hispanic	3,321	39.6%	34,393	38.6%	90,956	38.8%
Other	1,256	15.0%	13,662	15.3%	38,420	16.4%
Unknown	308	3.7%	4,555	5.1%	8,452	3.6%
Age						
0-17	1,008	12.0%	3,828	4.3%	7,553	3.2%
18-29	561	6.7%	2,436	2.7%	7,538	3.2%
30-44	1,348	16.1%	8,365	9.4%	23,277	9.9%
45-64	3,487	41.6%	35,111	39.4%	90,228	38.5%
65+	2,025	24.2%	40,176	45.1%	109,810	46.8%
Total	**8,381**		**89,021**		**234,474**	

SDS, 10/15, *TX Medicaid Reimbursement for Diabetes (Type I and Type II) by PHR_FY14_final.xls*. Includes FFS; STAR; STAR+PLUS. Unduplicated **Total**, but # and % may not equal total as clients may be in more than one race, age, sex category