ChangeLab Solutions
Law & policy innovation for the common good.

A Key Tool in Health Care: Diabetes Self-Management Education and Training (DSME/T)

Maryland: Background, Benefits, and Insurance Coverage of DSME/T

This fact sheet provides information about public and private insurance coverage for diabetes self-management education and training (DSME/T)[i] services in Maryland.

Diabetes and DSME/T in the United States

The nation is in the grips of a diabetes epidemic. According to the Centers for Disease Control and Prevention, 30.3 million Americans have diabetes,[1] exceeding the entire population of Texas.[2] In 2015, 1.5 million adults were diagnosed—more than 4,100 every day.[1] One in 3 adults has prediabetes, which often leads to diabetes.[1]

Some risk factors for developing type 2 diabetes are increased age, higher weight, high blood pressure, high cholesterol, and physical inactivity.[3] Further, people of color disproportionately bear the burden of type 2 diabetes and the related health effects. They are more likely to be diagnosed with the disease,[1] are less likely to have positive diabetes control indicators, such as lower A1c levels,[4] and experience worse health outcomes overall.[5–7]

Effective diabetes management depends largely on individual self-care,[8,9] making DSME/T critical to addressing this epidemic. DSME/T is "the process of facilitating the knowledge, skill, and ability necessary for diabetes self-care."[10] This process requires incorporating patients' unique needs and experiences into individualized education and support plans that promote new behaviors and solutions.[10] These solutions include healthy eating, physical activity, self-monitoring, medication use, risk reduction, management of acute and chronic complications, and problem-solving strategies to address psychosocial issues and establish healthy habits.[11]

Research shows that by giving patients the tools necessary to better manage their diabetes, DSME/T significantly improves health outcomes[12–15] and reduces health care expenditures.[8,9,16–23] Indeed, "persons with diabetes who do not receive [DSME/T] are four times as likely as those who do to develop a major diabetes complication."[24]

Despite this evidence, participation in DSME/T remains low,[25,26] particularly among rural populations,[12] Medicare[27] and Medicaid beneficiaries,[16] uninsured or underinsured persons,[28,29] and "ethnic minorities, older persons, and persons with language barriers and low literacy."[24] Moreover, DSME/T services often do not conform to best practices.[28] To offer the most effective care, providers may consider patterning DSME/T services after the National Standards for Diabetes Self-Management Education and Support, developed by the American Diabetes Association (ADA) and American Association of Diabetes Educators (AADE).[11]

Insurance coverage presents one lever for facilitating delivery of and access to high-quality DSME/T. In many states, statutes and regulations require public and private insurers to cover DSME/T services. Some Medicaid materials, including managed care contracts and Medicaid agency guidance, have specific DSME/T coverage requirements. Public health professionals and policymakers may use these statutes, regulations, and Medicaid materials to understand the patterns, trends, and gaps in DSME/T coverage and to identify opportunities for reform.

Diabetes in Maryland

As of 2015, nearly 1 in 10 adults in Maryland had been diagnosed with diabetes—more than 481,000 individuals in total.[30] African Americans in Maryland are more than twice as likely as non-Hispanic whites to have the disease.[31] Hispanic individuals ages 65 and older in Maryland are 1.7 times more likely than non-Hispanic whites to have the disease.[32] According to the ADA, an additional 1.63 million people—36.9% of the state's adult population—have prediabetes.[33]

In 2015, 38.9% of Maryland adults with diabetes reported "fair or poor" general health, and 69.5% reported having poor mental or physical health at least 1 day in the past 30 days.[30] However, in 2015, more than 7% of Maryland adults with the disease did not visit a health professional for their diabetes, and only 75.4% received 2 or more A1c tests in the past year.[30] The annual medical and economic costs attributable to diabetes in Maryland exceeds $8.3 billion.[34]

MD Diabetes Burden Compared with National Diabetes Burden (Age-Adjusted)[30,35]	MD	U.S.
% of Adults with Diagnosed Diabetes (2015)	9.4%	9.1%[iii]
New Cases of Diabetes / 1,000 Adults (2015)	6.6	6.5
Completed a DSME/T Class [ii] (2010)	48.7%	57.4%
Daily Self-Monitoring Blood Glucose [ii] (2010)	61.5%	63.6%
Overweight or Obese [ii] (2010)	90.9%	84.7%
Physical Inactivity [ii] (2010)	42.8%	36.1%
High Blood Pressure [ii] (2015)	71.5%	57.9%[iii]
High Cholesterol [ii] (2015)	54.2%	55.5%[iii]

[i] DSME/T may also be referred to as diabetes self-management education (DSME), diabetes self-management training (DSMT), or diabetes self-management education and support.

[ii] Adults with Self-reported Diagnosed Diabetes

[iii] 50 States + DC: US Median

Current State Insurance Coverage for DSME/T

This section examines DSME/T coverage by the 3 primary sources of health insurance: private insurance, Medicare, and Medicaid. Private insurance includes coverage provided by an employer, purchased through an Affordable Care Act Marketplace, or purchased directly from an insurer. Medicare is a public health insurance program that provides coverage for most individuals ages 65 or older, as well as certain individuals with disabilities.[36] Medicaid is a public health insurance program for many low-income populations, certain individuals with disabilities, and pregnant women. Unlike Medicare, Medicaid limits eligibility based upon an individual's income and assets.[37] These limitations, as well as the services Medicaid covers, vary among the states.[38]

Insurance Type	Private	Medicare	Medicaid
% of State Population[39]	64%	12%	15%
Coverage Required	Yes	Part B only	Yes* (See below)
Cost Sharing	Varies by plan	Up to 20% copay Deductible	Not specified
Limitations	Referral required	10 hours within 12 months of initial referral 2 hours annual follow-up training Referral required	* Managed care only

Private Insurance

Maryland requires private health insurance policies to provide coverage for outpatient DSME/T, including medical nutrition therapy.[40] Before receiving DSME/T, an individual must receive a certification of medical necessity from their treating physician or another appropriately licensed health care provider.[40] DSME/T, including medical nutrition therapy, must be "provided through a program supervised by an appropriately licensed, registered, or certified health care provider whose scope of practice includes diabetes education or management."[41] Insurers may impose the same cost-sharing requirements applicable to similar covered benefits.[42]

Medicare Coverage

Medicare provides recipients with up to 10 hours of outpatient DSME/T in the year following their first referral for DSME/T.[43,44] Subject to limited exception,[45] recipients may receive 1 hour of private training and 9 hours of group training.[46] Recipients may qualify for up to 2 hours of follow-up training each year after they receive initial training.[47] To receive coverage for DSME/T, a Medicare recipient must obtain a referral from the health care professional treating the recipient's diabetes[48,49] and receive the training from an ADA- or AADE-accredited program.[48,50] Recipients may be responsible for any applicable deductible and a copay up to 20% of the total cost of DSME/T services.[48,51]

Medicaid Coverage

Maryland's Medicaid program covers all individuals at or below 138% of the federal poverty level ((approximately $33,948 for a family of four in 2017)[52] as well as certain populations that do not otherwise meet the income eligibility requirements, such as some pregnant women.[38,53] Most Medicaid beneficiaries in Maryland receive coverage through HealthChoice, a Medicaid managed care program.[54] Managed care organizations participating in HealthChoice are required to provide beneficiaries diagnosed with diabetes with both diabetes nutrition counseling[55] and diabetes outpatient education.[56]

Conclusion

Research suggests that by empowering patients to manage their diabetes, DSME/T can improve health outcomes and reduce treatment costs.[12–23] Private insurance and Medicaid coverage for DSME/T services may help with the provision of and access to DSME/T. States that already require such coverage might consider building on those efforts by ensuring covered DSME/T services comply with the National Standards. They may also consider reducing barriers to access, such as pre-authorization requirements, cost sharing, and utilization limitations; raising awareness about the availability of DSME/T; and increasing the frequency and duration of DSME/T services.

Resources

Maryland Medicaid Information
https://mmcp.dhmh.maryland.gov

Medicare DSME/T Information
http://bit.ly/2wC4pRE

Diabetes Information from the CDC
www.cdc.gov/diabetes/

LawAtlas Maryland DSME/T Website
http://j.mp/2cnxero

This publication was supported by the Grant or Cooperative Agreement Number 5U38OT000141-03 awarded to ChangeLab Solutions and funded by the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention or the Department of Health and Human Services. ChangeLab Solutions is a nonprofit organization that provides legal information on matters relating to public health. The legal information in this document does not constitute legal advice or legal representation. For legal advice, readers should consult a lawyer in their state. © 2017 ChangeLab Solutions
Document last updated on May 1, 2017.

References

1. Centers for Disease Control and Prevention. *National Diabetes Statistics Report, 2017*. Atlanta, GA: Centers for Disease Control and Prevention; 2017. https://www.cdc.gov/diabetes/pdfs/data/statistics/national-diabetes-statistics-report.pdf.

2. U.S. Census Bureau PD. Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2015. United States Census Bureau Website. http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk. Published 2015. Accessed February 4, 2016.

3. Am I at Risk for Type 2 Diabetes? Taking Steps to Lower Your Risk of Getting Diabetes. National Institute of Diabetes and Digestive and Kidney Diseases website. http://www.niddk.nih.gov/health-information/health-topics/Diabetes/type-2-diabetes-taking-steps-lower-your-risk-diabetes/Pages/index.aspx#7. Published 2012. Accessed February 29, 2016.

4. Risk Factors for Complications. Centers for Disease Control and Prevention website. http://www.cdc.gov/diabetes/statistics/risk_factors_national.htm. Accessed January 22, 2016.

5. Health Status and Disability. Centers for Disease Control and Prevention website. http://www.cdc.gov/diabetes/statistics/health_status_national.htm. Accessed January 22, 2016.

6. Diabetes Complications. Centers for Disease Control and Prevention website. http://www.cdc.gov/diabetes/statistics/complications_national.htm. Accessed January 22, 2016.

7. Hospitalization. Centers for Disease Control and Prevention website. http://www.cdc.gov/diabetes/statistics/hospitalization_national.htm. Accessed January 22, 2016.

8. Ryan JG, Jennings T, Vittoria I, Fedders M. Short and long-term outcomes from a multisession diabetes education program targeting low-income minority patients: A six-month follow up. *Clin Ther*. 2013;35(1):A43-A53. doi:10.1016/j.clinthera.2012.12.007.

9. Ruppert K, Uhler A, Siminerio L. Examining patient risk factors, comorbid conditions, participation, and physician referrals to a rural diabetes self-management education program. *Diabetes Educ*. 2010;36(4):603-612. doi:10.1177/0145721710369705.

10. Powers MA, Bardsley J, Cypress M, et al. Diabetes self-management education and support in type 2 diabetes: A joint position statement of the American Diabetes Association, the American Association of Diabetes Educators, and the Academy of Nutrition and Dietetics. *Diabetes Care*. 2015;38(7):1372-1382. http://care.diabetesjournals.org/content/38/7/1372.full.pdf.

11. Haas L, Maryniuk M, Beck J, et al. National standards for diabetes self-management education and support. *Diabetes Care*. 2014;37(Supplement 1):S144-S153. doi:http://dx.doi.org/10.2337/dc14-S144.

12. Lepard MG, Joseph AL, Agne AA, Cherrington AL. Diabetes Self-Management Interventions for Adults with Type 2 Diabetes Living in Rural Areas: A Systematic Literature Review. *Curr Diab Rep*. 2015;15(6):37.

13. Norris SL, Nichols PJ, Caspersen CJ, et al. Increasing Diabetes Self-Management Education in Community Settings: A Systematic Review. *Am J Prev Med*. 2002;22(4S):39-66.

14. Brunisholz KD, Briot P, Hamilton S, et al. Diabetes self-management education improves quality of care and clinical outcomes determined by a diabetes bundle measure. *J Multidiscip Healthc*. 2014;7:533-542. doi:10.2147/JMDH.S69000.

15. Chrvala CA, Sherr D, Lipman RD. Diabetes self-management education for adults with type 2 diabetes mellitus: A systematic review of the effect on glycemic control. *Patient Educ Couns*. November 2015. doi:10.1016/j.pec.2015.11.003.

16. Balamurugan A, Ohsfeldt R, Hughes T, Phillips M. Diabetes self-management education program for Medicaid recipients: A continuous quality improvement process. *Diabetes Educ*. 2006;32(6):893-900. doi:10.1177/0145721706294787.

17. Frye R. Self-management education is the key to helping Medicaid patients with diabetes. *Health Care Strateg Manage*. 1997;15(11):16-17.

18. Boren SA, Fitzner KA, Panhalkar PS, Specker JE. Costs and benefits associated with diabetes education: a review of the literature. *Diabetes Educ*. 2009;35(1):72-96.

19. Duncan I, Birkmeyer C, Coughlin S, Li Q (Emily), Sherr D, Boren S. Assessing the Value of Diabetes Education. *Diabetes Educ*. 2009;35(5):752-760.

20. Duncan I, Ahmed T, Li Q, et al. Assessing the value of the diabetes educator. *Diabetes Educ*. 2011;37(5):638-657. doi:10.1177/0145721711416256.

21. Brownson CA, Hoerger TJ, Fisher EB, Kilpatrick KE. Cost-effectiveness of diabetes self-management programs in community primary care settings. *Diabetes Educ*. 2009;35(5):761-769.

22. Li R, Zhang P, Barker LE, Chowdhury FM, Zhang X. Cost-Effectiveness of Interventions to Prevent and Control Diabetes Mellitus: A Systematic Review. *Diabetes Care*. 2010;33(8):1872-1894. http://care.diabetesjournals.org/content/33/8/1872.long.

23. Micklethwaite A, Brownson CA, O'Toole ML, Kilpatrick KE. The Business Case for a Diabetes Self-Management Intervention in a Community General Hospital. *Popul Health Manag*. 2012;15(4):230-235.

24. Strine TW, Okoro CA, Chapman DP, Beckles G LA, Balluz L, Mokdad AH. The impact of formal diabetes education on the preventive health practices and behaviors of persons with type 2 diabetes. *Prev Med (Baltim)*. 2005;41(1):79-84.

25. Age-Adjusted Percentage of Adults Aged 18 Years or Older with Diagnosed Diabetes Ever Attending a Diabetes Self-Management Class, United States, 2000–2010. Centers for Disease Control and Prevention website. http://www.cdc.gov/diabetes/statistics/preventive/fY_class.htm. Accessed January 21, 2016.

26. Li R, Shrestha SS, Lipman R, Burrows NR, Kolb LE, Rutledge S. Diabetes self-management education and training among privately insured persons with newly diagnosed diabetes — United States, 2011–2012. *Morb Mortal Wkly Rep*. 2014;63(46):1045-1049. www.cdc.gov/mmwr/preview/mmwrhtml/mm6346a2.htm.

27. Strawbridge LM, Lloyd JT, Meadow A, Riley GF, Howell BL. Use of Medicare's diabetes self-management training benefit. *Heal Educ Behav*. 2015;42(4):530-538. doi:10.1177/1090198114566271.

28. Shaw K, Killeen M, Sullivan E, Bowman P. Disparities in diabetes self-management education for uninsured and underinsured adults. *Diabetes Educ*. 2011;37(6):813-819. doi:10.1177/0145721711424618.

29. Carpenter DM, Fisher EB, Greene SB. Shortcomings in Public and Private Insurance Coverage of Diabetes Self-Management Education and Support. *Popul Health Manag*. 2012;15(3):144-148.

30. United States Diabetes Surveillance System. Centers for Disease Control and Prevention website. http://gis.cdc.gov/grasp/diabetes/DiabetesAtlas.html. Accessed August

22, 2017.

31. Sharfstein JM, Horon I, Sparks G. *Maryland Vital Statistics Annual Report*. Baltimore, MD; 2013. http://dhmh.maryland.gov/vsa/documents/13annual.pdf.

32. Chen JC, Mann DA, Hussein CA. *Maryland Chartbook of Minority Health and Minority Health Disparities Data With Sections on Gender-Specific Health and Jurisdiction-Specific Health*. Baltimore, MD; 2012. https://sph.umd.edu/sites/default/files/files/Maryland Health Disparities Data Chartbook 2012 021413.pdf.

33. American Diabetes Association. *The Burden of Diabetes in Maryland*.; 2015. http://main.diabetes.org/dorg/PDFs/Advocacy/burden-of-diabetes/maryland.pdf.

34. Diabetes State Burden Toolkit. Centers for Disease Control and Prevention website. https://nccd.cdc.gov/Toolkit/DiabetesBurden/.

35. Chronic Disease Indicators Comparison Report. Centers for Disease Control and Prevention website. http://nccd.cdc.gov/CDI/rdPage.aspx?rdReport=DPH_CDI.ComparisonReport. Accessed August 22, 2017.

36. Original Medicare (Part A and B) Eligibility and Enrollment. Centers for Medicare & Medicaid Services website. https://www.cms.gov/medicare/eligibility-and-enrollment/origmedicarepartabeligenrol/index.html. Accessed August 22, 2017.

37. Centers for Medicare & Medicaid Services. Eligibility. Medicaid.gov website. https://www.medicaid.gov/medicaid/eligibility/index.html. Accessed August 22, 2017.

38. Kaiser Family Foundation. *Where Are States Today? Medicaid and CHIP Eligibility Levels for Children, Pregnant Women, and Adults*.; 2017. http://www.kff.org/medicaid/fact-sheet/where-are-states-today-medicaid-and-chip/.

39. Kaiser Family Foundation. Health Insurance Coverage of the Total Population. Kaiser Family Foundation website. http://kff.org/other/state-indicator/total-population/. Published 2015. Accessed August 22, 2017.

40. Md. Code Ann., Ins. § 15-822(b).

41. Md. Code Ann., Ins. § 15-822(c).

42. Md. Code Ann., Ins. § 15-822(d).

43. Centers for Medicare & Medicaid Services. Diabetes self-management training. Medicare.gov website. https://www.medicare.gov/coverage/diabetes-self-mgmt-training.html. Accessed August 22, 2017.

44. 42 C.F.R. § 410.141(c)(1)(i)(B)-(C).

45. 42 C.F.R. § 410.141(c)(1)(ii).

46. 42 C.F.R. §§ 410.141(c)(1)(i)(D), (F).

47. 42 C.F.R. § 410.141(c)(2)(i).

48. Administration on Aging. AoA Diabetes Self-Management (DSMT) Toolkit. 2015. https://www.acl.gov/sites/default/files/programs/2016-11/AoA-DSMT-Toolkit-2015.pdf.

49. 42 C.F.R. §§ 410.141(b)(1), (c)(2)(v).

50. 42 C.F.R. § 410.142-.145.

51. 42 C.F.R. § 410.152(b).

52. U.S. Department of Health & Human Services. U.S. Federal Poverty Guidelines Used to Determine Financial Eligibility for Certain Federal Programs. Office of the Assistant Secretary for Planning and Evaluation website. https://aspe.hhs.gov/poverty-guidelines. Published 2017. Accessed August 24, 2017.

53. Centers for Medicare & Medicaid Services. Medicaid & CHIP in Maryland. Medicaid website. https://www.medicaid.gov/medicaid/by-state/stateprofile.html?state=maryland. Accessed September 21, 2017.

54. Maryland Department of Health and Mental Hygiene. HealthChoice. Maryland Medical Assistance Programs website. https://mmcp.dhmh.maryland.gov/Pages/home.aspx. Accessed June 13, 2016.

55. Md. Code Regs. 10.09.67.24(B)(1).

56. Md. Code Regs. 10.09.67.24(B)(2).