



**A Key Tool in Health Care: Diabetes Self-Management Education and Training (DSME/T)  
Nebraska: 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)<sup>i</sup> services in Nebraska.

**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,<sup>1</sup> exceeding the entire population of Texas.<sup>2</sup> In 2015, 1.5 million adults were diagnosed—more than 4,100 every day.<sup>1</sup> One in 3 adults has prediabetes, which often leads to diabetes.<sup>1</sup>

Some risk factors for developing type 2 diabetes are increased age, higher weight, high blood pressure, high cholesterol, and physical inactivity.<sup>3</sup> 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,<sup>1</sup> are less likely to have positive diabetes control indicators, such as lower A1c levels,<sup>4</sup> and experience worse health outcomes overall.<sup>5-7</sup>

Effective diabetes management depends largely on individual self-care,<sup>8,9</sup> 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.”<sup>10</sup> This process requires incorporating patients’ unique needs and experiences into individualized education and support plans that promote new behaviors and solutions.<sup>10</sup> 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.<sup>11</sup>

Research shows that by giving patients the tools necessary to better manage their diabetes, DSME/T significantly improves health outcomes<sup>12-15</sup> and reduces health care expenditures.<sup>8,9,16-23</sup> 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.”<sup>24</sup>

Despite this evidence, participation in DSME/T remains low,<sup>25,26</sup> particularly among rural populations,<sup>12</sup> Medicare<sup>27</sup> and Medicaid beneficiaries,<sup>16</sup> uninsured or underinsured persons,<sup>28,29</sup> and “ethnic minorities, older persons, and persons with language barriers and low literacy.”<sup>24</sup> Moreover, DSME/T services often do not conform to best practices.<sup>28</sup> 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).<sup>11</sup>

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 Nebraska**

As of 2015, approximately 1 in 12 adults in Nebraska had been diagnosed with diabetes—more than 125,000 individuals in total.<sup>30</sup> Hispanic individuals, American Indians, and African Americans in Nebraska are about twice as likely as non-Hispanic whites to have the disease.<sup>31</sup> American Indians in Nebraska are more than 4 times more likely and African Americans in the state are nearly 3 times more likely than non-Hispanic whites to die from diabetes.<sup>31</sup> According to the ADA, an additional 487,000 individuals—35.8% of the state’s adult population—have prediabetes.<sup>32</sup>

In 2015, 31.9% of Nebraska adults with diabetes reported “fair or poor” general health, and 56.7% reported poor mental or physical health at least 1 day in the past 30 days.<sup>30</sup> However, in 2015, 12.4% of Nebraska adults with diabetes did not visit a health professional for their diabetes.<sup>30</sup> The annual medical and economic costs attributable to diabetes in Nebraska exceeds \$2 billion.<sup>33</sup>

<b>NE Diabetes Burden Compared with National Diabetes Burden (Age-Adjusted)<sup>30,34</sup></b>	<b>NE</b>	<b>U.S.</b>
% of Adults with Diagnosed Diabetes (2015)	8%	9.1% <sup>iii</sup>
New Cases of Diabetes / 1,000 Adults (2015)	7.3	6.5
Completed a DSME/T Class <sup>ii</sup> (2010)	61%	57.4%
Daily Self-Monitoring Blood Glucose <sup>ii</sup> (2010)	75.8%	63.6%
Overweight or Obese <sup>ii</sup> (2010)	84%	84.7%
Physical Inactivity <sup>ii</sup> (2010)	45.7%	36.1%
High Blood Pressure <sup>ii</sup> (2015)	58.5%	57.9% <sup>iii</sup>
High Cholesterol <sup>ii</sup> (2015)	55.5%	55.5% <sup>iii</sup>

<sup>i</sup> 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.

<sup>ii</sup> Adults with Self-reported Diagnosed Diabetes  
<sup>iii</sup> 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.<sup>35</sup> 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.<sup>36</sup> These limitations, as well as the services Medicaid covers, vary among the states.<sup>37</sup>

Insurance Type	Private	Medicare	Medicaid
% of State Population <sup>38</sup>	62%	13%	13%
Coverage Required	Yes	Part B only	No
Cost Sharing	Varies by plan	Up to 20% copay Deductible	-
Limitations	Prescription required \$500 limit every 2 years	10 hours within 12 months of initial referral 2 hours annual follow-up training Referral required	-

### Private Insurance

Nebraska requires private health insurance policies to provide coverage for outpatient DSME/T, including medical nutrition therapy, when prescribed by a health care professional with prescriptive authority.<sup>39,40</sup> Private insurance covers medically necessary DSME/T for a patient upon their diabetes diagnosis, a change in their symptoms or condition, when new medications or treatments are prescribed, or when refresher training is necessary.<sup>40,41</sup> Coverage may not exceed \$500 in a 2-year period.<sup>41</sup>

DSME/T must be provided by an ADA-recognized program or a health professional certified as a diabetes educator by the National Certification Board for Diabetes Educators.<sup>42</sup> Services may be conducted individually or in group sessions,<sup>40</sup> and home visits are permitted when medically necessary.<sup>40</sup> Insurers may impose cost-sharing requirements such as deductibles, copayments, and network incentives.<sup>43</sup>

### Medicare Coverage

Medicare provides recipients with up to 10 hours of outpatient DSME/T in the year following their first referral for DSME/T.<sup>44,45</sup> Subject to limited exception,<sup>46</sup> recipients may receive 1 hour of private training and 9 hours of group training.<sup>47</sup> Recipients may qualify for up to 2 hours of follow-up training each year after they receive initial training.<sup>48</sup> To receive coverage for DSME/T, a Medicare recipient must obtain a referral from the health care professional treating the recipient's diabetes<sup>49,50</sup> and receive the training from an ADA- or AADE-accredited program.<sup>49,51</sup> Recipients may be responsible for any applicable deductible and a copay up to 20% of the total cost of DSME/T services.<sup>49,52</sup>

### Medicaid Coverage

Nebraska's Medicaid program covers certain low-income populations, including low-income pregnant women, parents or other caretaker relatives, children, individuals 65 years of age or older, and individuals with disabilities.<sup>53,54</sup> The program does not explicitly indicate that beneficiaries receive coverage for DSME/T. However, the state's Medicaid managed care organizations are required to provide general preventive care services, such as "engag[ing] members in self-management strategies to monitor their disease process and improve their health."<sup>55</sup> These strategies seek to help individuals "effectively manage conditions and prevent complications" by ensuring they take their medication as prescribed, monitor their vital signs, and make healthier choices about eating and exercising.<sup>55</sup>

### Conclusion

Research suggests that by empowering patients to manage their diabetes, DSME/T can improve health outcomes and reduce treatment costs.<sup>12-23</sup> 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

#### Nebraska Medicaid Information

[www.accessnebraska.ne.gov](http://www.accessnebraska.ne.gov)

#### Medicare DSME/T Information

<http://bit.ly/2wC4pRE>

#### Diabetes Information from the CDC

[www.cdc.gov/diabetes/](http://www.cdc.gov/diabetes/)

#### LawAtlas Nebraska DSME/T Website

<http://j.mp/2cnyrPC>

## References

- 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>.
- 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.
- 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.
- Risk Factors for Complications. Centers for Disease Control and Prevention website. [http://www.cdc.gov/diabetes/statistics/risk\\_factors\\_national.htm](http://www.cdc.gov/diabetes/statistics/risk_factors_national.htm). Accessed January 22, 2016.
- Health Status and Disability. Centers for Disease Control and Prevention website. [http://www.cdc.gov/diabetes/statistics/health\\_status\\_national.htm](http://www.cdc.gov/diabetes/statistics/health_status_national.htm). Accessed January 22, 2016.
- Diabetes Complications. Centers for Disease Control and Prevention website. [http://www.cdc.gov/diabetes/statistics/complications\\_national.htm](http://www.cdc.gov/diabetes/statistics/complications_national.htm). Accessed January 22, 2016.
- Hospitalization. Centers for Disease Control and Prevention website. [http://www.cdc.gov/diabetes/statistics/hospitalization\\_national.htm](http://www.cdc.gov/diabetes/statistics/hospitalization_national.htm). Accessed January 22, 2016.
- 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.
- 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.
- 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>.
- 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>.
- 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.
- 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.
- 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.
- 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.
- 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.
- Frye R. Self-management education is the key to helping Medicaid patients with diabetes. *Health Care Strateg Manage*. 1997;15(11):16-17.
- 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.
- 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.
- Duncan I, Ahmed T, Li Q, et al. Assessing the value of the diabetes educator. *Diabetes Educ*. 2011;37(5):638-657. doi:10.1177/01457217111416256.
- 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.
- 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>.
- 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.
- 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.
- 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](http://www.cdc.gov/diabetes/statistics/preventive/fy_class.htm). Accessed January 21, 2016.
- 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](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6346a2.htm).
- 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.
- 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.
- 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.
- 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. Zhang A, Horner S. *Nebraska Health Disparities Report: Health Equity for All Nebraskans.*; 2015. [http://dhhs.ne.gov/publichealth/Documents/Nebraska Health Disparities Report Final.pdf](http://dhhs.ne.gov/publichealth/Documents/Nebraska%20Health%20Disparities%20Report%20Final.pdf).
32. American Diabetes Association. *The Burden of Diabetes in Nebraska.*; 2015. <http://main.diabetes.org/dorg/PDFs/Advocacy/burden-of-diabetes/nebraska.pdf>.
33. Diabetes State Burden Toolkit. Centers for Disease Control and Prevention website. <https://nccd.cdc.gov/Toolkit/DiabetesBurden/>.
34. Chronic Disease Indicators Comparison Report. Centers for Disease Control and Prevention website. [http://nccd.cdc.gov/CDI/rdPage.aspx?rdReport=DPH\\_CDI.ComparisonReport](http://nccd.cdc.gov/CDI/rdPage.aspx?rdReport=DPH_CDI.ComparisonReport). Accessed August 22, 2017.
35. 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.
36. Centers for Medicare & Medicaid Services. Eligibility. Medicaid.gov website. <https://www.medicaid.gov/medicaid/eligibility/index.html>. Accessed August 22, 2017.
37. 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/>.
38. 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.
39. Neb. Rev. Stat. § 44-790(1).
40. Neb. Rev. Stat. § 44-790(3).
41. Neb. Rev. Stat. § 44-790(5).
42. Neb. Rev. Stat. § 44-790(4).
43. Neb. Rev. Stat. § 44-790(6).
44. 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.
45. 42 C.F.R. § 410.141(c)(1)(i)(B)-(C).
46. 42 C.F.R. § 410.141(c)(1)(ii).
47. 42 C.F.R. §§ 410.141(c)(1)(i)(D), (F).
48. 42 C.F.R. § 410.141(c)(2)(i).
49. 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>.
50. 42 C.F.R. §§ 410.141(b)(1), (c)(2)(v).
51. 42 C.F.R. § 410.142-.145.
52. 42 C.F.R. § 410.152(b).
53. Centers for Medicare & Medicaid Services. Medicaid & CHIP in Nebraska. Medicaid website. <https://www.medicaid.gov/medicaid/by-state/stateprofile.html?state=nebraska>. Accessed September 22, 2017.
54. Nebraska Medical Assistance Program. Benefits.gov website. <http://www.benefits.gov/benefits/benefit-details/1302>. Accessed June 15, 2016.
55. State of Nebraska State Purchasing Bureau. Nebraska Request for Proposal for Contractual Services Form: RFP 5151Z1. 2015:111. [http://das.nebraska.gov/materiel/purchasing/5151/5151Z1 MCO SPB 10 20 15 djo.pdf](http://das.nebraska.gov/materiel/purchasing/5151/5151Z1%20MCO%20SPB%2010%2015%20djo.pdf).