



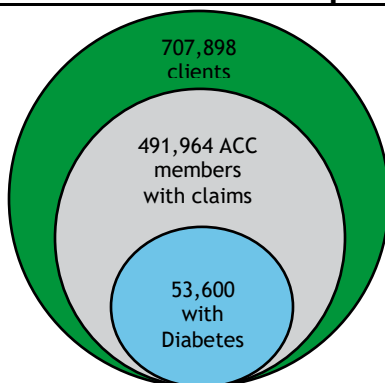
Diabetes Self-Management Education/Training (DSME/T)

- DSME/T is a critical point of care for people with diabetes in order to delay or prevent diabetes complications
- The program is accredited through **The American Diabetes Association (ADA)** and **The American Association of Diabetes Educators (AADE)**
- The program is a total of 10 hours for the first year (1 hour of individual counseling (\$107 per hour); 9 hours in a group setting (\$29.44 per hour) per Medicare coverage and reimbursement)
- The average cost of DSME/T is \$350 to \$400 per patient, for one year of 10 hours of education, per Medicare reimbursement rates in Colorado
- Following the first year of DSME/T, 2 hours of DSME/T are allowed per year
- The DSME/T team includes either a Registered Nurse (RN), Registered Dietician (RD), Pharmacist, Certified Diabetes Educator (CDE), or a Board-Certified Advanced Diabetes Management professional (BC-ADM).
- Community Health Workers (CHWs) and Patient Navigators (PNs) can teach self-management classes as well as provide ongoing Diabetes Self-Management Support (DSMS)
- The objective of DSME/T is to improve clinical outcomes, health status, and quality of life (**improved A1c of up to -1.7% change**). Specific self-care behaviors include:
 - Healthy eating and being active
 - Monitoring and taking medication
 - Problem solving and healthy coping
 - Reducing risks

State Medicaid Programs Reimbursement for DSME/T

- DSME/T is covered by private insurance and Medicare, nationally and in Colorado
- Accredited DSME/T programs are covered by **30** state Medicaid programs
- Colorado Medicaid does not cover DSME/T
- Coverage varies state to state, but most mimic Medicare coverage

Colorado Medicaid Population and Diabetes



Colorado Medicaid data indicate that about **11%** of Accountable Care Collaborative (ACC) members have a diagnosis of diabetes (**53,600** of the 491,964 ACC enrolled members with a claims history).

Of the 707,898 Medicaid clients enrolled in the ACC, an estimated **235,966** have **prediabetes**. Without weight loss and moderate physical activity, 15-30% of people with prediabetes will develop type 2 diabetes within 5 years.



The Cost of Diabetes for Medicaid

Average annual spend per client with diabetes: \$16,070.43

Average annual spend per client without diabetes: \$3,779.14

\$12,291.29 additional annual spending per client with diabetes

Total annual costs related to diabetes (\$12,291.29 x 53,600)= **\$658,813,144**

Budget Savings for Providing DSME/T

Cost analysis of DSME/T found a return on investment of **\$4.34 for every \$1 spent** (Berg and Wadhwa, 2002)

Hospitalization rates are **34% lower** for patients who had at least one diabetes educational visit (Robbins et al., 2008)

A study by Duncan, et al, published in 2009, documented that commercially insured members who use DSME/T cost, on average, **5.7% less** than members who do not participate in diabetes education.

Using 5.7% savings and assuming 100% participation in DSME/T for the full amount (10 hours) in year 1 at the cost of \$400 per person: **Net Savings = \$27,658,136**
\$2.29:1 ROI

Total costs for providing 10 hours of DSME/T services to 53,600 Medicaid beneficiaries	\$21,440,000
A 5.7% reduction of the \$16,070.43 annual cost per client with diabetes	\$15,154.42 new annual cost per client with diabetes
Additional annual spending per client with diabetes (\$15,154.42 - \$3,779.15 average annual spending)	\$11,375.29 new additional annual spending per client with diabetes
Total annual costs per year related to diabetes (\$11,375.29 x 53,600)	\$609,715,008 total annual costs per year related to diabetes
Total savings from 5.7% reduction in costs per client (\$658,813,144 - \$609,715,008)	\$49,098,136
Factoring in the cost of providing DSME/T (\$49,098,136 - \$21,440,000)	Net Savings = \$27,658,136

In the study’s commercially insured population, the gap between the cost of the DSME/T population and the non-DSME/T population increased over time, so that by year 3 the non-diabetes education population average cost was 12% higher. These results indicate the benefits of DSME/T have both immediate and long-term implications for cost savings.

**Resources:**

1. Centers for Disease Control and Prevention. National Diabetes Statistics Report, 2014 <http://www.cdc.gov/diabetes/pubs/statsreport14/national-diabetes-report-web.pdf>
2. CDC National Diabetes Surveillance System www.cdc.gov/diabetes/statistics/preventive/tNewDEduAgeTot.htm Last visited June 8, 2007.
3. Berg GD, Wadhwa S. Diabetes disease management in a community-based setting. *Managed Care*. 2002; 11:45-50.
4. Robbins JM, Thatcher GE, Webb DA, Valdmanis VG., “Nutritionist Visits, Diabetes Classes, and Hospitalization Rates and Charges: The Urban Diabetes Study”, *Diabetes Care*, 2008, Apr 30(4)655-60.
5. Duncan I, et al. Assessing the value of diabetes education. *Diabetes Educ*. 2009 Sep-Oct;35(5):752-60.
6. Colorado Revised Statutes. Title 10. Insurance Health Care Coverage. Article 16: Health Care Coverage [C.R.S. 10-16-104](http://www.crs.org/10-16-104)
7. Estimated Federal Impact of H.R. 962/ S. 452 “The Medicare Diabetes Prevention Act” 2014 <http://www.diabetes.org/assets/pdfs/advocacy/estimated-federal-impact-of.pdf>