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

![Diagram showing Medicaid population data]

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**

| 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: