

Montana Diabetes Prevention Program

Montana secured Medicaid reimbursement for chronic disease prevention services through a state plan amendment.

Through an approved state plan amendment (agreement between a state and the Federal government about how a state administers its Medicaid), the [Montana Department of Public Health and Human Services](#) (DPHHS) was able to establish Medicaid reimbursement for services provided through the Montana Diabetes Prevention Program (DPP) sites. This partnership between the public health program and Medicaid was formalized under the Medicaid Incentives for Prevention of Chronic Diseases (MIPCD) Program grant and enabled an existing program designed to prevent type 2 diabetes and reduce cardiovascular disease (CVD) to serve high-risk adult Medicaid enrollees. This goal is achieved through weight loss promoted by healthy diet choices and regular physical activity. This intensive lifestyle intervention uses an evidence-based curriculum delivered by trained lifestyle coaches and focuses on making healthy, sustainable lifestyle changes. Participants are required to self-monitor total calories, fat grams, and aim for 150 minutes or more of physical activity on a weekly basis in efforts to achieve their seven percent weight loss goal.

Steps Taken:

- Based on outcomes from the National Institutes of Health's (NIH) randomized controlled clinical trial published in 2002 and 2005 showing DPP to be an effective intervention, Montana DPHHS was inspired to create the [Montana DPP](#) in 2008. The program enrolls adults who are at risk for developing CVD and type 2 diabetes, including Medicaid beneficiaries.
- The program received funding from the state for four pilot sites and has since expanded to include 18 healthcare facilities. These sites include diabetes self-management programs, cardiac rehabilitation programs, local health departments, and rural health centers.
- In 2010, DPHHS conducted a BRFSS-like health assessment of a sample of adult Medicaid enrollees aged 18-64. The findings indicated that the prevalence of risk factors (e.g., smoking and obesity) and chronic disease (e.g., diabetes) were significantly higher among adults in Medicaid compared to the general population. The DPHHS used those findings, along with NIH's [2005 study](#) showing the cost-effectiveness of DPP, to target collaborative efforts with Medicaid.
- In 2012, Medicaid opted to include DPP as a covered benefit for its beneficiaries and reimbursed sites for providing the service.
- Montana DPHHS provided support for DPP implementation in community settings by providing:
 - Funding to organizations to partially support DPP implementation including scholarships to low income participants if fees apply;
 - Funding to support DPP via telehealth to frontier populations;
 - Promotion of transportation benefits to Medicaid enrollees;

- Seventy percent of participants in the Montana Diabetes Prevention Program achieved the physical activity goal of 150 minutes or more per week.
- Forty-five percent of the participants achieved the seven percent weight loss goal.
- Participants who completed the intervention showed significant improvements in blood pressure, fasting glucose, and LDL cholesterol.

- Training and technical assistance for lifestyle coaches on the DPP curriculum, inclusive fitness, evaluation, and adapted materials such as larger print materials for people with disabilities;
- Support for recruitment of participants with mental illness; and,
- Accountability of funded DPP sites in the form of biannual meeting attendance, monthly data submission, and quality checks on the data.
- Montana DPHHS utilized Medicaid administrative claims data to identify primary care practices who had patients at high-risk for diabetes and provided targeted outreach to those providers for referrals to the DPP. A tiered and incrementally increasing cash incentive was offered to Medicaid participants, using a third-party vendor, through the MIPCD program starting in 2012 with the intention to test if incentives affect program adherence and goal achievement. The maximum total cash incentive per Medicaid participant was \$320 provided through debit cards, which could be drawn down over a period of time.

Results:

- An [evaluative pilot study](#) conducted by the Montana DPHHS showed that the intervention can be successfully translated into practice in the general community.
 - Out of 295 participants, 83 percent completed the core program.
 - Seventy percent of participants achieved the physical activity goal of 150 minutes or more per week. The average weight loss per participant was 6.7 percent of initial body weight. Forty-five percent of the participants achieved the seven percent weight loss goal, and 67 percent achieved at least five percent weight loss. Participants who monitored their fat intake were more likely to meet the seven percent weight loss goal compared with non-monitoring participants.
 - The findings show that the DPP core lifestyle intervention (adapted for a group setting) achieved weight loss and physical activity outcomes comparable to the original NIH implementation of the DPP.
- A [larger evaluative study](#) analyzed weight loss and cardio-metabolic risk reduction achieved through the adapted DPP intervention.
 - Out of 1,003 participants (overweight adults with cardiovascular disease and a risk factor for diabetes), 81 percent completed the core and 58 percent completed the after core.
 - At core completion, 45 percent of participants achieved the seven percent weight loss goal, 66 percent achieved five percent weight loss, and 66 percent met the physical activity goal.
 - Of the 58 percent who completed the after core, 49 percent achieved the program weight loss goal, 64 percent achieved five percent weight loss, and 70 percent achieved the physical activity goal at the end of core.
 - There were significant improvements in blood pressure, fasting glucose, and LDL cholesterol among participants completing the intervention.
 - The findings confirm it is feasible for state-coordinated CVD and DPP-like programs to achieve significant weight loss, improve cardio-metabolic risk, and reduce or delay the onset of diabetes.

Lessons Learned:

- Development and implementation of DPPs are a way for clinical and public health systems to meet the growing challenge of obesity, diabetes, and CVD.
- Diabetes and CVD prevention services must be billable and reimbursable by public and private insurers and included as a benefit in self-insured employer packages in order to be sustainable.
- Broad eligibility requirements and reliance on physician referrals enables recruitment of a large number of high-risk patients without the potential barriers and additional costs related to diabetes screening events, blood testing, and follow-up.
- Recruitment of participants should not be limited to persons with diagnosed pre-diabetes. DPP-like programs should seek to include overweight adults with risk factors for heart disease or diabetes, an approach supported by [recommendations](#) to providers from the American Diabetes Association and the American Heart Association.
- State diabetes programs can support development and implementation of community-based DPPs through technical assistance and training, advocacy regarding billing and reimbursement by insurers, data collection and analysis, and program evaluation.
- Healthcare sites interested in implementing a DPP are encouraged to uphold minimum program standards according to the Centers for Disease Control and Prevention Diabetes Prevention Recognition Program. The ultimate goal is to have national standards to ensure consistency across programs nationwide.
- DPP lifestyle interventions are needed, not only for prevention but to treat new onset diabetes. Both the [American Association of Clinical Endocrinologists](#) and the [Endocrine Society](#) recommend lifestyle intervention as first-line therapy for reducing cardio-metabolic risk. Furthermore, the Community Guide to Preventive Medicine [has recently concluded](#) that DPP-like interventions are effective and should be implemented.

For more information:

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