

**Second Report to Congress**

**Medicaid Incentives for Prevention of Chronic Diseases Evaluation**

**U.S. Department of Health and Human Services**

**June, 2016**

## **BACKGROUND**

Section 4108 of the Patient Protection and Affordable Care Act (Affordable Care Act) mandated the creation of the Medicaid Incentives for Prevention of Chronic Diseases (MIPCD) program for states to develop evidence-based prevention programs that provide incentives to Medicaid beneficiaries to participate in and complete the planned interventions. In September 2011, 10 states (California, Connecticut, Hawaii, Minnesota, Montana, Nevada, New Hampshire, New York, Texas, and Wisconsin) were awarded demonstration grants to implement chronic disease prevention approaches for their Medicaid enrollees to test the use of incentives to encourage behavior change. These states were required to demonstrate Medicaid beneficiary changes in health risks and outcomes. Consistent with the requirements of section 4108 of the Affordable Care Act, the Centers for Medicare & Medicaid Services (CMS) awarded a contract to RTI International (RTI) to conduct an independent, evaluation of the 10 state programs. This independent evaluation presents results through November 15, 2015. As required by the law, this evaluation focuses on:

- the effect of such programs on the use of health care services by Medicaid beneficiaries participating in the program;
- the extent to which special populations (including adults with disabilities, adults with chronic illnesses, and children with special health care needs) were able to participate in the program;
- the level of satisfaction of Medicaid beneficiaries with respect to the accessibility and quality of health care services provided through the program; and
- the administrative costs incurred by state agencies that are responsible for administration of the program.

As part of the MIPCD authorization, the Affordable Care Act requires that the Secretary of the Department of Health and Human Services submit an initial and a final report to Congress on the MIPCD programs. The initial report to Congress was submitted in November 2013. The report provided an interim evaluation of the effectiveness of the programs based on information provided by the states through their semi-annual self-reports. Consistent with the requirement to include a recommendation regarding whether the programs should be expanded or extended beyond January 1, 2016, the initial report included the statement “At this time, there is insufficient evidence to recommend for or against extending funding of the programs beyond January 1, 2016.”

The section 4108 mandate for this final report to Congress, which is due no later than July 1, 2016, is to include the results of the independent assessment, together with recommendations for such legislation and administrative action as the Secretary determines appropriate. However, the state level self-evaluations will not end until September 2016, and the CMS evaluation is not expected to be completed until April 2017. Therefore, completed analyses are not yet available for each focus area of the evaluation. Final results of the independent assessment are not yet available for inclusion in the report and, therefore, recommendations are not proposed. Further, it is important to note that the short-term effects on health outcomes (especially from weight

reduction and smoking) will likely be minimal, as the expected reduction in morbidity/mortality could take decades to measurably decline.

The independent evaluation report by RTI accompanies the final report to Congress (see Appendix 1).

## **DESCRIPTION OF STATE PROGRAMS**

States received their grants on September 11, 2011. The states concluded their involvement with participants and incentives in December 2015 but will continue with their self-evaluation until September 2016. Targeted conditions and behaviors across state programs included smoking, diabetes, obesity, hyperlipidemia, and hypertension. The programs encouraged participants to use quitlines and nicotine replacement therapy (NRT) to stop smoking; lose weight and increase physical activity to prevent diabetes, hyperlipidemia, hypertension, and heart disease; and take an active role in preventing other chronic diseases. As shown below, all but four states were targeting multiple conditions, and three states were targeting four or more conditions.

### **Comparison of medical conditions and health behaviors addressed across state programs**

State	Smoking	Diabetes	Obesity	Hyperlipidemia	Hypertension
California	✓	—	—	—	—
Connecticut	✓	—	—	—	—
Hawaii	—	✓	—	—	—
Minnesota	—	✓	✓	—	—
Montana	—	✓	✓	✓	✓
Nevada	—	✓	✓	✓	✓
New Hampshire	✓	—	✓	—	—
New York	✓	✓	—	—	✓
Texas	✓	✓	✓	✓	✓
Wisconsin	✓	—	—	—	—
Total	6	6	5	3	4

All of the states are conducting traditional randomized controlled trials with some variations. New Hampshire is using an equipoise-stratified randomized design with participants selecting their treatment options within the program. Montana is using a crossover design with sites changing from control to intervention (and vice versa) after 18 months in the program. California and Hawaii are using quasi-experimental designs in addition to the randomized controlled trial design.

### **Incentives**

Incentives covered a wide range of participant activities that were process-based (e.g. attending a meeting), outcome-based (e.g. attaining a weight goal) or both. All states gave participants monetary incentives in the form of cash (e.g. \$5 for a smoking quitline call), a gift card or other money-value item, or flexible spending account funds (e.g. \$1,150 per year). Money was the most

common type of incentive and was offered through prepaid debit cards and a flexible spending account for wellness activities. Four states offered prepaid debit cards in combination with other incentives. More than 80 percent of participants who received or expected to receive flexible spending accounts or points to pick something from a catalog strongly agreed that the incentives helped them (or would help them) set goals or work toward them, that they liked getting incentives for taking good care of their health, and that they were happy with the incentives.

## **RESULTS**

### **Implementation of State Programs**

All states were able to establish the structural and logistical organization and processes for a Medicaid incentives program. This was a basic, but important, accomplishment because states had relatively little experience with Medicaid incentive programs prior to MIPCD (Blumenthal et al., 2013). Building on existing chronic disease prevention programs, established relationships with Medicaid providers or interagency agreements facilitated states' MIPCD program implementation. Still, states faced numerous challenges in implementing their programs, and starting up their programs took the majority of states longer than anticipated. Reasons for implementation delays included the need to hire and train staff, obtain Institutional Review Board (IRB) approval, and formalize partnerships and contracts. Each challenge was critical and had a profound impact on the six states that took 6 months to 2 years longer than projected to implement their programs. States addressed implementation delays and program challenges by implementing numerous program changes, with programs continuously evolving.

Delays in implementing programs and the associated challenges in recruiting participants had a significant impact on states' enrollment targets (with the exception of Texas), with seven programs reducing their initial projections by between 42 percent and 85 percent. States worked hard to recruit participants, with three states expanding program eligibility to include additional Medicaid eligible participants. States strove to make programs accessible by providing transportation, reimbursing participants for public transportation, meeting participants in their home, or providing services telephonically, so participants did not have to travel. Accessibility also encompassed cultural and linguistic sensitivity, with states hiring culturally competent staffs who have worked with or are members of the target population and partnering with organizations familiar with these populations. States modified outreach strategies and incentives based on their success in reaching the populations being targeted. The majority of programs found that collaborating with providers, clinics, and managed care organizations (MCOs) was an important tool in identifying potentially eligible participants and providing referrals and enrollment. Several states used provider incentives, and some modified them to increase provider engagement. For example, Connecticut, Minnesota, and Wisconsin paid providers to recruit participants. States adapted and modified outreach strategies and program features during and throughout implementation as they sought to address challenges. Through the Learning Collaborative, states shared challenges and lessons learned with one another, and used the information to modify their programs. The 10 demonstration states showed great flexibility as they adapted to challenges and implemented their programs to meet the needs of their targeted populations in adopting healthier program behaviors.

## Utilization and Expenditures of Health Care Services

Utilization and expenditures of health care services are being evaluated based on three sources of data: Medicaid claims data, state self-evaluation of program specific outcomes, and the MIPCD Minimum Data Set (MDS) (see Limitations below).

Medicaid claims from eight states were analyzed to evaluate whether MIPCD participants enrolled in the incentive group had lower utilization of health care services and lower Medicaid expenditures than participants in the control group. Two states have not provided claims data (Hawaii and New York). For those states with available claims data (Texas, California, Minnesota, Connecticut, Montana, Nevada, Wisconsin and New Hampshire), the differences in utilization rates (hospitalization and emergency department use) between the treatment and control groups showed inconsistent patterns, with both improvements and declines, but none of these differences were statistically significant..

The state-level self-evaluations will provide additional information on the outcomes the states were targeting—for example, smoking quit rates, weight reduction, or improvements in hypertension or diabetes control (not available in Medicaid claims). Behavioral outcomes are only available for California at this time. In preliminary reporting of outcomes data (California), receipt of nicotine replacement therapy plus cash incentives was associated with a significantly higher ( $p < 0.05$ ) likelihood of self-reporting a quit attempt and a 30-day period of abstaining from smoking compared with the control group. Reductions in smoking in the short-term may avert smoking-related health conditions, leading to long-term reductions in hospitalizations, ED visits, and costs. Thus, the lack of significant effects in the Medicaid claims data on utilization or costs in the short-term does not imply that the MIPCD program will not affect these measures over a longer time period. California's positive finding aligns with the goals of the MIPCD program, but general conclusions regarding the effectiveness of the MIPCD program cannot be drawn from one state.

The majority of the behavioral outcome results from state-level self-evaluations are not available at this time but will be incorporated into the final contractor evaluation report due to CMS in February 2017. Analyses will take advantage of post-participation claims data and examine the program effectiveness on smoking quit rates, weight reduction, and/or improvements in hypertension or diabetes control.

Another important source of data is the states' MIPCD Minimum Data Sets (MDS) which were submitted to the evaluation contractor. The MDS proved to be a rich source of information on the services and incentives received by program participants. Findings on service utilization suggest that, for most of the MIPCD states, the treatment group used more incentivized services than the control group. Future analyses will examine in greater detail how engagement in the program varies over time and by incentive type. For example, in states incentivizing attendance at a diabetes prevention program, does attendance wane over time, or are participants less likely to receive incentives for meeting predetermined milestones in health (e.g., weight reductions) compared with incentives for meeting process measures (e.g., meeting with a health coach)?

Taken together, analyses of the Medicaid claims data, MIPCD State MDS, and state-led evaluation findings will provide a comprehensive picture of the short-term impacts of the MIPCD program on service use, expenditures, and health outcomes.

## **Participation by Special Populations**

Special populations were able to participate in the incentive programs. All of the state programs targeted adults with or at risk of chronic disease, which is one of the three special populations highlighted in the legislation. Two of the programs—New Hampshire and Texas—focused on persons with behavioral health and/or substance use disorders, and most other programs also served adults with disabilities, the second group highlighted in the legislation. The largest program arm in Nevada served children with special health care needs.

## **Beneficiary Satisfaction**

Beneficiary satisfaction with the accessibility and quality of the incentive programs was ascertained through focus groups, stakeholder interviews, and a beneficiary survey. The results were largely complementary and consistent: beneficiaries expressed high levels of satisfaction with the program.

Based on qualitative findings from focus groups with MIPCD participants, overall impressions of the incentive programs, and particularly the program staff, were positive. Participants provided generally positive feedback on the enrollment process and access to program activities. Participants identified a few barriers to access, including lack of transportation to program activities and limited cell phone minutes to access telephonic program components. Participants reported very positive experiences and satisfaction levels with program staff, using words such as “trustworthy,” “caring,” “supportive,” and “motivational” to describe staff. Participants said that staff supported and motivated them to achieve their health goals. Experience and satisfaction with program materials was limited, with some participants not recalling having received materials and others feeling overwhelmed with respect to the amount provided.

The majority of participants characterized the incentives as motivators (“a kick start”) to enroll in the programs and, to a lesser extent, as an encouragement to remain in the programs. The following were typical comments from focus group participants: “The money was an incentive, I’m not going to lie. That made me call [the quitline] and it kept me aware of, ‘I know I want to do this,’” and “First it was about the card, then it got to me because I was getting something free. Then I started taking a look at it and I was like, ‘Well, hey, maybe I need to do something about this breathing.’” Some participants reported logistical challenges and confusion concerning the process to obtain incentives. Inherent differences in program designs across states contributed to different levels of beneficiary satisfaction. Participants enrolled in state programs with in-person counseling components, flexibility in program counseling activities, personal accountability in meeting health goals, and simple and clear incentive guidelines tended to report higher levels of satisfaction.

Results from the beneficiary survey indicated that 94% of respondents were very or somewhat satisfied with the program and with accessibility of program activities and staff. They also reported that the program had helped them to make positive changes to improve their health. The findings suggest that females and racial and ethnic minorities may be somewhat more satisfied with the program.

## **Administrative Costs**

RTI estimated that administrative costs accounted for about 25 percent of overall expenditures in MIPCD programs during the first 3 years. Total costs were categorized as services (i.e., patient navigation, Weight Watchers classes), incentives (cash or products such as NRT), and administrative costs (project management). This estimate comes with a number of caveats because the cost data were not reported uniformly across states and only 7 of the 10 states provided the information necessary for estimating administrative costs. More importantly, the administrative cost share of total costs fell in years 2 and 3 as enrollment in the programs increased. That trend is likely to continue in years 4 and 5 of the program. Therefore, over the full 5-year period, administrative costs may account for less than 25 percent of total costs. The final evaluation report will report on administrative costs for the full 5-year period.

Looking at costs more broadly, states spent about \$2.2 million on incentive payments to participants during the first 3 years, representing about 7 percent of total costs. There were several reasons why incentive payments were relatively low. First, most states spent significant amounts to provide services as integral parts of their program rather than cash incentives. For example, California provided nicotine replacement therapy, New Hampshire paid for gym memberships and Weight Watchers, Texas provided patient navigators, and several states paid for diabetes prevention programs. Some states considered the services as part of the incentive provided to participants, but they were reported on the administrative form as a service rather than an incentive. Second, delays in implementation and enrollment have slowed incentive payments. Because states spent less in total than they budgeted in the first year of their programs, spending on incentives was correspondingly lower than budgeted. As enrollment continued to increase in years 4 and 5 of the programs, the incentives paid out accounted for a greater share of overall program costs. Third, these figures do not reflect final incentives that were paid out. This is especially true of outcome incentives, which were paid to participants who achieved behavioral outcomes such as weight loss or reductions in tobacco use. Fourth, it appears likely that some states initially overestimated the amount that would be paid as incentives to participants. Several of the states revised their initial estimates of enrollment downward; if fewer persons participated and incentive payments per person were fixed, total incentive payments also fell.

In the final contractor evaluation report, the return on investment in each program will be estimated. This estimate will account for the cost of the program (including administrative costs, incentive payments, and service costs) and any reductions in Medicaid spending attributable to the program. The cost impacts will also be evaluated alongside the health benefits achieved by the program. It is premature to estimate program return on investment at this time, because the impact of prevention of chronic diseases may accrue slowly over time and not be manifest in the short-term. Data on changes in health outcomes that would precede long-term savings in spending has not yet been obtained.

## **LIMITATIONS**

Several limitations of the Medicaid claims analyses and the MIPCD State MDS analyses need to be acknowledged. First, Medicaid claims from two states are not available at this time. Second, this analysis does not incorporate Medicare claims data for MIPCD participants dually enrolled in Medicare and Medicaid or managed care claims. As a result, the assessment of

utilization and expenditures for these participants is limited to their Medicaid utilization. Analyses of special populations is limited to analysis of the impact of the MIPCD programs on utilization and expenditures to dual Medicare-Medicaid enrollees and those enrolled in Medicaid due to disability in all States, with two exceptions. In Texas, the analysis is for Medicare-Medicaid enrollees only as all participants are enrolled in Medicaid due to disability. In Nevada, none of the participants were Medicare-Medicaid enrollees or disabled and are not included in the special populations analysis. For the MIPCD State MDS analyses, the number of enrollees in the incentive and control groups varies substantially each quarter by State, ranging from 171 participants in Montana to 3,556 in California. With small sample sizes in some States, statistical differences in expenditures and utilization are difficult to detect. Further, states varied in the amount of pre- and post-period data available. Participants who entered the program closer to program roll-out had more post-period data than those who entered the program closer to the date the State submitted the Medicaid claims data for analysis. This difference in post-period data may have biased the findings presented in this report toward no program effect. Further, health and behavioral outcomes of participants have not been examined as data are missing on many of these outcomes. Future submissions by each State's MIPCD MDS will be more complete allowing subsequent analyses. Finally, the survey data from the state of Hawaii was not included at this time.

## **CONCLUSION**

States have demonstrated that they were able to design and implement incentive programs for Medicaid beneficiaries. Implementation was not always straightforward, and some states experienced delays in implementation. Nevertheless, all of the states were eventually able to implement their programs and enroll participants. Their experiences may offer valuable lessons learned for other states considering implementation of incentive programs. Some of the states experienced challenges in recruiting participants and providers for the programs. These challenges were common among prevention programs, and states responded by increasing their recruitment efforts. In several cases, states lowered their enrollment targets.

Once enrolled, beneficiaries were very or somewhat satisfied with the programs. Participants thought the programs helped them make healthy changes in their behavior. Not surprisingly, participants liked receiving incentives, but they thought that the impact of the incentives was strongest in encouraging them to enroll in the program and less important later when improving health became a more important motivator.

Special populations (i.e., adults with mental illness or substance use disorders, racial/ethnic minorities, pregnant women and mothers of newborns, children, and Medicare-Medicaid enrollees) were able to participate in Medicaid incentive programs.

Two states focused on persons with behavioral health or substance use disorders, one state's largest program arm focused on children, and all of the states focused on adults with or at risk of chronic diseases. We estimated that administrative costs represented about 25 percent of overall program expenditures through the first 3 years of the program. In the final analysis we expect to see that administrative costs declined in years 4 and 5 of the program as participant enrollment increased; however, these data are not yet available for study.

To date, the claims analysis has found that the incentive programs have statistically insignificant effects on utilization and expenditures. However, the claims data are not complete, and even if the incentives prevent chronic diseases, the effects of prevention on utilization and expenditures may not be apparent in the short term. From the analysis of the MIPCD MDS, the provision of incentives have led to significant increases in process measures, such as tobacco cessation counseling visits and diabetes prevention classes attended, but only limited information is available on health outcomes, such as smoking quits or weight loss. The state program evaluations will examine health outcomes in detail, and these findings will be included in the final evaluation report.

Therefore, because the impacts of the MIPCD programs on utilization, expenditures, and health outcomes are unresolved, we believe at this time that there is still insufficient evidence for or against recommending that funding be expanded for Medicaid incentive programs. We will focus on assessing these impacts as our evaluation continues and more information becomes available. The final evaluation report will be completed in February 2017.

## References

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