# Can Incentives Improve Medicaid Patient Engagement and Prevent Chronic Diseases?

*Thomas J. Hoerger, Rebecca Perry, Kathleen Farrell, Stephanie Teixeira-Poit*

**Under the Medicaid Incentives for the Prevention of Chronic Diseases model, 10 states are testing whether incentives can encourage Medicaid beneficiaries to lose weight, stop smoking, work to prevent diabetes, or control risk factors for other chronic diseases. This commentary describes these incentive programs and how they will be evaluated.**

In 2011, the Centers for Medicare & Medicaid Services (CMS) awarded grants to 10 states to develop Medicaid Incentives for the Prevention of Chronic Diseases (MIPCD) programs. The programs test whether providing monetary incentives to Medicaid beneficiaries can enhance beneficiary engagement and help prevent chronic diseases. In this commentary, we describe the MIPCD programs and discuss the key questions they raise. We then describe how these questions are being addressed in the ongoing evaluation of these programs.

## Background

Chronic diseases—including cancer, diabetes, heart disease, respiratory conditions, and stroke—account for nearly 60% of deaths and the majority of health care spending in the United States [1]. Many cases of chronic disease can be prevented or delayed by quitting smoking, losing weight, exercising more, and/or better managing risk factors such as hypertension or high cholesterol. However, getting individuals to change their behavior is challenging. Old habits are hard to break because the health benefits of prevention accrue slowly in the future, while the immediate pleasures of a tasty dessert or a welcome cigarette break must be given up today and on a sustained basis. For people who qualify for Medicaid due to low income, the general challenges of chronic disease prevention may be compounded by other challenges such as limited education, unemployment, poor housing, other health problems, or unstable family relationships. In the face of these challenges, preventing chronic disease in the distant future may be a relatively low priority.

Economists have long espoused the importance of monetary incentives—both prices and cash subsidies—as instruments to change individual behavior. More recently, although psychologists and behavioral economists have noted that people often make decisions that deviate in predictable ways from being perfectly rational [2, 3], they have also stressed that properly designed policies and incentives can nudge individuals to make better decisions [4]. This emphasis has led to a renewed interest in using incentives to promote health behaviors.

Kane and colleagues reviewed 47 randomized controlled trials of economic incentives to encourage prevention, and they concluded that the incentives worked 73% of the time [5]. The authors found that economic incentives were effective for simple preventive care (one-time vaccination or prenatal care), but they were uncertain about the size of the incentive that would be needed to sustain long-term effects. More recent studies have found that economic incentives led to short-term weight loss [6-8]. These studies tied the incentives to achievement of outcomes (weight loss) rather than to process variables (such as attendance in weight loss classes).

Incentives have been rarely used in Medicaid programs. In a review of such programs, Blumenthal and coauthors found only 3 major incentive programs offered by state Medicaid agencies [9]. Participation in the programs was relatively low, and most of the incentives were paid for childhood prevention or office visits. The review reported that evaluation of program effectiveness was limited; there was no clear evidence of a relationship between incentives and effectiveness; and there were low levels of program awareness among Medicaid beneficiaries. Blumenthal and coauthors recommended future study and better evaluation of Medicaid incentive programs; they also cautioned against making incentive structures too complicated for participants, relying too heavily on providers to publicize the programs, and creating too many administrative complexities [9].

## MIPCD Programs

In Section 4108 of the Patient Protection and Affordable Care Act of 2010 (ACA), Congress authorized creation of state MIPCD programs. Under this authority, CMS awarded

Electronically published July 1, 2015.

Address correspondence to Dr. Thomas J. Hoerger, RTI International, 3040 Cornwallis Rd, PO Box 12194, Research Triangle Park, NC 27709 (tjh@rti.org).

**N C Med J. 2015;76(3):180-184.** 
0029-2559/2015/76311

10 states grants with which to establish MIPCD programs; these states were California, Connecticut, Hawaii, Minnesota, Montana, Nevada, New Hampshire, New York, Texas, and Wisconsin. States were given flexibility in designing their programs. The programs target a variety of conditions and behaviors, including tobacco use, diabetes, obesity, hyperlipidemia, and hypertension (see Table 1). Tobacco cessation programs in California, Connecticut, and Wisconsin combine existing tobacco quit lines with incentives and additional services. Minnesota, Montana, and some of the program arms in Nevada and New York provide diabetes prevention programs. In Nevada, the largest program arm serves children who are at risk for heart disease, whereas the state's other programs serve adults. New Hampshire and Texas have developed programs that focus on persons with mental health conditions or substance use issues.

Incentives vary across states (see Table 2), with most programs providing cash payments, debit cards, or monetary-value incentives. Incentive amounts range from $20 in California's simplest program arm to $1,150 per year in Texas (see Table 3). Texas has a unique program that offers a wellness account and health navigators to persons with previous mental health conditions or substance abuse issues. In most states, incentives are integrated with supportive services such as diabetes prevention classes, tobacco cessation classes, wellness coaches, nicotine replacement therapy, and/or access to gyms.

The first MIPCD program began enrolling beneficiaries in January of 2012, and all of the states had begun enrollment by June of 2013. As of December 31, 2014, a total of 17,134 beneficiaries had enrolled in these programs. The programs are currently authorized to provide incentives through December 31, 2015.

**TABLE 1.**
**Medical Conditions and Health Behaviors Targeted by State MIPCD 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** |

Note. MIPCD, Medicaid Incentives for the Prevention of Chronic Diseases.

## Key Questions

The incentive programs raise a number of important questions. First, given limited experience with Medicaid incentive programs, is it possible for states to implement successful programs? If implemented, will beneficiaries participate? If beneficiaries participate, will they be satisfied with their access to programs and the quality of these programs? Can specific segments of the Medicaid population participate, including children, people with mental illness, and/or people with substance abuse issues? Will participation in the MIPCD programs reduce medical care utilization and costs? How much will it cost to administer a statewide program? Finally—and most importantly—do participants in the incentives programs change their health behaviors and achieve better health outcomes?

## Evaluation

Recognizing the importance of answering these questions, Congress authorized the MIPCD programs as demonstration projects and required both state and national evaluations of the programs. Each state is required to evaluate the effectiveness of its program(s), with special emphasis on measuring and validating changes in health behaviors and outcomes. To achieve this goal, most states have ran-

**TABLE 2.**
**Participant Incentives in State MIPCD Programs**

| State | Money | Money-valued incentives | Flexible spending accounts for wellness activities | Prevention-related incentives | Treatment-related incentives | Points redeemable for rewards | Support to address barriers to participation |
|---|---|---|---|---|---|---|---|
| California | — | ✓ | — | — | ✓ | — | — |
| Connecticut | ✓ | — | — | — | — | — | — |
| Hawaii | ✓ | ✓ | — | ✓ | — | ✓ | ✓ |
| Minnesota | ✓ | — | — | ✓ | — | — | ✓ |
| Montana | ✓ | — | — | — | — | — | ✓ |
| Nevada | — | — | — | — | — | ✓ | — |
| New Hampshire | ✓ | — | — | ✓ | ✓ | — | ✓ |
| New York | ✓ | — | — | — | — | — | — |
| Texas | — | — | ✓ | ✓ | ✓ | — | ✓ |
| Wisconsin | ✓ | ✓ | — | — | — | — | ✓ |
| **Total** | **7** | **3** | **1** | **4** | **3** | **2** | **6** |

Note. MIPCD, Medicaid Incentives for the Prevention of Chronic Diseases.

*Caveney sidebar*

domly assigned beneficiaries between intervention arms (where beneficiaries receive incentives) and control arms (where beneficiaries receive similar services but no incentives). States will provide evaluation reports after the programs stop providing incentives on December 31, 2015.

For the national evaluation, RTI International is performing an independent assessment of several factors: the programs' impact on the utilization and costs of health care services by participating Medicaid beneficiaries, the extent to which specific populations can participate in the programs, the level of beneficiary satisfaction with access to and quality of program services, and the administrative costs required to implement and operate the programs. In addition, the national evaluation is examining the implementation process across states to synthesize findings from the individual states. To examine these impacts, RTI is performing a mixed-methods evaluation using document review, site visits, focus groups, a beneficiary survey, Medicaid claims analysis, and cost reports. Findings from the national evaluation will be included in 2 reports to Congress and a final evaluation report.

The initial report to Congress [10] was submitted in November of 2013 and provided early information on the implementation and progress of the MIPCD programs. Implementation of the programs was delayed in some states, but all states were able to implement the programs

*Caveney sidebar continued*

by June of 2013. Implementation challenges included administrative delays and issues related to provider engagement, identification of participants, and management of incentives. States sometimes changed their plans to overcome these challenges. States learned that it was important to be flexible in meeting challenges, to communicate closely with partners and providers, to train and sometimes pay providers to participate, and to incorporate cultural awareness into the programs.

The initial report to Congress was required by law to include a recommendation on whether funding should be expanded or extended beyond January 1, 2016. The report concluded, "At this time, there is insufficient evidence to recommend for or against extending funding of the programs beyond January 1, 2016. Most of the State programs have been enrolling participants for only a short period, and there are few data on the effect of the programs on health outcomes or health care utilization and costs. Therefore, it would be premature to make a recommendation to extend funding to expand or extend the programs beyond January 1, 2016" [10].

## Discussion

The MIPCD model is one of many initiatives in Title IV of the ACA that is designed to prevent chronic disease and improve public health. Although the ACA as a whole has

been widely debated, most observers recognize the importance of reducing the burden of chronic disease and associated costs—both to the US health care system in general and to the Medicaid program in particular. Incentive programs offer a potentially attractive means for better engaging Medicaid beneficiaries and encouraging them to change unhealthy behaviors. As a result, 10 states were eager to test Medicaid incentive programs.

To date, the MIPCD programs have shown that Medicaid incentive programs can be implemented, but many other important evaluation questions have not yet been answered. The ongoing state and national evaluations will provide valuable evidence about whether Medicaid incentive programs can engage beneficiaries and whether they lead to better health behavior, improved health outcomes, and/or lower Medicaid costs. NCMJ

**TABLE 3.**
**MIPCD Incentives for Participants**

| State | Maximum financial incentive per person[a] |
|---|---|
| California | Eligible callers who ask for the Medi-Cal Incentives to Quit (MIQS) incentive: Maximum study incentive: $20 |
| | Randomized controlled trial 1: Maximum study incentive: $60 |
| | Randomized controlled trial 2: Maximum study incentive: $40 |
| | Enhanced services that are not part of a randomized controlled trial: TBD |
| Connecticut | Maximum annual amount: $350 |
| Hawaii | Maximum annual amount: $215 |
| Minnesota | Maximum study incentive: $545 |
| Montana | Maximum annual amount: $315 |
| Nevada[b] | Managed care organization for diabetes management: Maximum study incentive: $355 |
| | Managed care organization for weight management class: Maximum study incentive: $38 |
| | Managed care organization for weight management support group: Maximum study incentive: $60 |
| | YMCA of Southern Nevada: Maximum study incentive: $300 |
| | Healthy Hearts Program for Children: Maximum study incentive: $350 |
| New Hampshire | Weight loss: Maximum incentive for 24 months: $3,097 |
| | Weight loss: Maximum incentives for 12 months: $1,860 |
| | Smoking cessation: Maximum study incentive: $415 |
| New York | Maximum study incentive: $250 |
| Texas | Maximum annual amount: $1,150 |
| Wisconsin | Wisconsin Tobacco Quit Line: Maximum study incentive: $270 |
| | First Breath: Maximum study incentive: $600 |

Note. MIPCD, Medicaid Incentives for the Prevention of Chronic Diseases; TBD, to be determined.
[a]Projected maximum incentive amounts are based on information from state reports. Amounts may change during implementation.
[b]Nevada provides points that are redeemable for rewards; 100 points is equal to $1.

**Thomas J. Hoerger, PhD** senior fellow, RTI International, Research Triangle Park, North Carolina.
**Rebecca Perry, MSc** research public health analyst, RTI International, Research Triangle Park, North Carolina.
**Kathleen Farrell, BA** senior health researcher, RTI International, Research Triangle Park, North Carolina.
**Stephanie Teixeira-Poit, MS** research public health analyst, RTI International, Research Triangle Park, North Carolina.

## Acknowledgments

Financial support. RTI's evaluation of Medicaid Incentives for the Prevention of Chronic Diseases programs is supported by Contract #HHSM500201000021i from the Centers for Medicare & Medicaid Services. The findings and conclusions in this paper are those of the authors and do not necessarily represent the official position of the Centers for Medicare & Medicaid Services.

Potential conflicts of interest. All authors are employees of RTI International.

## References

1. Centers for Disease Control and Prevention (CDC). Deaths: final data for 2013: detailed tables for the National Vital Statistics Report. CDC website. http://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64_02.pdf. Accessed April 1, 2015.
2. Kahneman D. Thinking, Fast and Slow. New York, NY: Farrar, Straus and Giroux; 2011.
3. Ariely D. Predictably Irrational: The Hidden Forces That Shape Our Decisions. New York, NY: HarperCollins; 2008.
4. Thaler RH, Sunstein CR. Nudge: Improving Decisions About Health, Wealth, and Happiness. New York, NY: Penguin Books; 2008.
5. Kane RL, Johnson PE, Town RJ, Butler M. A structured review of the effect of economic incentives on consumers' preventive behavior. Am J Prev Med. 2004;27(4):327-352.
6. Finkelstein EA, Linnan LA, Tate DF, Birken BE. A pilot study testing the effect of different levels of financial incentives on weight loss among overweight employees. J Occup Environ Med. 2007;49(9):981-989.
7. Volpp KG, John LK, Troxel AB, Norton L, Fassbender J, Loewenstein G. Financial incentive-based approaches for weight loss: a randomized trial. JAMA. 2008;300(22):2631-2637.
8. Volpp KG, Troxel AB, Pauly MV, et al. A randomized, controlled trial of financial incentives for smoking cessation. N Engl J Med. 2009;360(7):699-709.
9. Blumenthal KJ, Saulsgiver KA, Norton L, et al. Medicaid incentive programs to encourage healthy behavior show mixed results to date and should be studied and improved. Health Aff (Millwood). 2013;32(3):497-507.
10. Sebelius K. Medicaid Incentives for Prevention of Chronic Diseases Evaluation: Initial Report to Congress. November 2013. http://innovation.cms.gov/Files/reports/MIPCD_RTC.pdf. Accessed April 1, 2015.