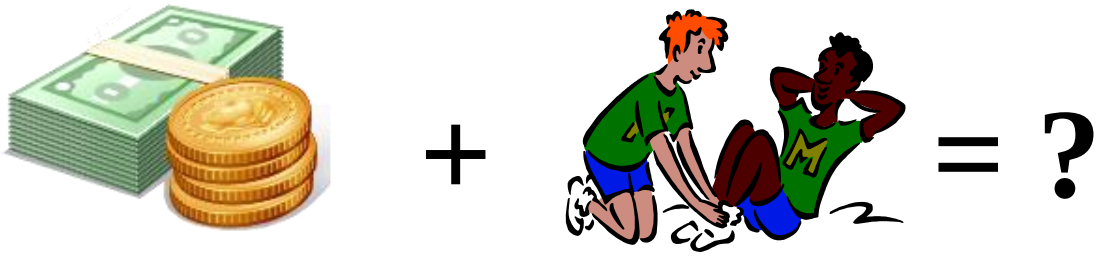

DO INCENTIVES WORK FOR MEDICAID MEMBERS?

A STUDY OF SIX PILOT PROJECTS

WISCONSIN DEPARTMENT OF HEALTH SERVICES
P-00499 (05/2013)

DO INCENTIVES WORK FOR MEDICAID MEMBERS?
A STUDY OF SIX PILOT PROJECTS

EXECUTIVE SUMMARY

Wisconsin's Medicaid program for low-income families, BadgerCare Plus, included a concentrated focus on improving the quality of care and encouraging individuals to take more responsibility for their health. Both system-level (e.g., pay-for-performance) and individual incentives were adopted to promote and support improved health outcomes and, over the long-term, reduce costs. These strategies were primarily focused on health conditions that could be ameliorated or prevented via enhanced clinic interventions or changes in lifestyles. For the individual incentive initiative, four key domains were targeted – well-child or EPSDT (Early Periodic Screening, Diagnosis and Treatment) exams, including immunizations and blood lead testing, birth outcomes, smoking and childhood obesity.

Following issuance of a Request for Proposals, six health maintenance organizations (HMOs) were awarded two-year grants to test whether offering financial incentives, such as gift cards or athletic equipment, would encourage BadgerCare Plus members to adopt healthier behaviors. The pilot projects were informed by the research and findings from focus groups with BadgerCare Plus members.

Two of the pilot projects were focused on reducing obesity among adolescents. Two projects focused on increasing well-child exams, with one focused on infants up to age one and one focused on children. One project targeted parents with toddlers (age two) to increase blood-lead testing. The sixth project used incentives to encourage early prenatal care and post-partum check-ups.

Each project had different interventions and target populations. Each tested various forms of incentives – gift cards, "healthy food" baskets, memberships to gyms, vouchers for diapers, free family meals, vouchers for athletic equipment and transportation vouchers / gas cards. All projects also provided patient education – through simple and colorful brochures and individual and group counseling. These education efforts highlighted the rationale for why changing behaviors was important and simple strategies for making the changes. For example, in the projects targeting obesity, participants learned about the impact of obesity on their health and small steps they could take to change their eating and activity habits, e.g., eat an apple instead of a bag of chips, move more such as parking further away from the school or playing a game of soccer.

In general, multi-pronged approaches were used to identify the target population, e.g., administrative records and referrals from health care providers. Member engagement activities included colorful mailings and personal telephone calls from HMO and health care staff associated with each project.

Findings and Conclusions

The Individual Incentive Initiative had very ambitious goals and each HMO established targeted health outcome measures. The aggressive goals were not reached, primarily due to initial design issues and the short-time frame for the interventions. Still, the pilot projects yielded valuable information about how to effectively structure incentive programs for Medicaid members.

Each project was successful in using administrative records to identify the target population. While numerous attempts were made to engage providers in making referrals, there was very limited return on this investment, i.e., only a small number of referrals came from primary care physicians or other health care providers.

Once identified, the HMOs did well in soliciting interest in the intervention – working with a nutritionist, attending group sessions to learn how to make healthier food choices or taking a toddler for a blood lead test. They were less successful in gaining actual participation. The data suggest that the offer of the incentives was not sufficient to generate broad enrollment or engagement in the intervention. Qualitatively, great insight was gained about how to appropriately identify the targeted population and promising strategies for generating interest and participation – personal telephone calls and colorful brochures.

Information from participant surveys and focus groups indicate that the incentives were appreciated and helped retain individuals once enrolled. This appears to be truer for children/youth than adults. The surveys and focus groups also show that patient education, e.g., why eating healthier foods is important, was almost as equally valued as the incentives. Youth reported that they appreciated the variety of incentives they could choose from and suggested that they would have been more likely to participate if they could have worked together in a group. Overall, the pilot projects confirmed findings in the literature that to be effective, incentives need to be easy to obtain and awarded as quickly as possible after the requirements are met.

All of the pilot projects experienced a number of implementation challenges. Qualitative information documents the extraordinary amount of time and effort that was needed to identify and recruit members, engage the HMO provider network and collect data. Another initial time-consuming task was making modifications to the intervention and incentives to facilitate enrollment and active participation based on issues identified via rapid cycle evaluation.

Summary
Wisconsin's Individual Incentive Initiative was designed to test whether financial incentives were effective in motivating BadgerCare Plus (Medicaid) members to adopt healthier behaviors. While informed by an extensive literature review and findings from focus groups with this population, none of the six funded projects reached their aggressive health outcome goals. Even so, the pilots provide valuable lessons for designing reward programs for low-income populations.

Acknowledgements

The Individual Incentive Initiative would not have been possible without the participation of the dedicated staff within the funded health maintenance organizations. A special thank you is due to the following individuals:

- Mark Rakowski and Laura Kerecman, Children's Community Health Plan
- Jaime Prickett, Dean Health Plan, Inc.
- Pamela Rundhaug, Managed Health Services, Inc.
- Mary Hesse and Gina Caltagerone, MercyCare Health Plans
- Julie Wallace and Shelly Kress, Security Health Plans of Wisconsin
- Ginger Dzick and Wendy Potochnik, UnitedHealthcare of Wisconsin/AmeriChoice

The Initiative was designed and guided by a diverse group of stakeholders – senior managers and program staff from three divisions within the Wisconsin Department of Health Services, administrators and senior staff from several health maintenance organizations, and researchers from the University of Wisconsin – Madison, Population Health Institute.

The analysis was conducted by Susan Cochran and Chris Swart, senior evaluators in the DHS Office of Policy Initiatives and Budget. Both also prepared various sections of the report. Linda McCart, Chief, Office of Policy Initiatives and Budget, was the project manager and co-author.

Table of Contents

List of Tables

DO INCENTIVES WORK FOR MEDICAID MEMBERS?
A STUDY OF SIX PILOT PROJECTS

Introduction

> *"At their core, incentives are a mechanism to create or reinforce positive health behaviors. Complying with medication routines, getting the annual screening, keeping children up to date on their immunizations—incentives are a tool to encourage this."*
> "The Art and Science of Health Incentives" 2007

Over the last decade, private businesses and many states have implemented workplace wellness programs to promote and encourage healthier behaviors. These initiatives often incorporate various types of incentives, e.g., premium reductions, gym memberships, free smoking cessation classes. The theory goes that if incentives could get individuals to be more responsible by adopting healthier behaviors — stop smoking, exercise more, eat healthier foods — the investment would pay off in lower health care costs and increased productivity. In 2008, Harris Interactive reported that 91 percent of employers "believed that they could reduce their health care costs by influencing employees to adopt healthier lifestyles."[1]

The fundamental question is "do incentives work?" If not, wellness programs will fail to generate the anticipated savings and health care costs will continue to rise. The evidence on incentives is mixed. The evidence on return on investment (ROI) in incentives is minimal, but growing.

There is some indication that incentives that attempt to impact simple behavior changes, such as keeping appointments for well-child exams or mammograms, have a positive impact.[2] Other studies suggest that financial incentives are less effective in promoting and sustaining complex behavior changes such as smoking cessation and weight loss.[3] Demographics also matter. Younger individuals are more likely than older ones to use incentives, especially those related to reduced cost-sharing or reduced insurance premiums.[4] Similarly, minorities and those with lower incomes are also more likely to take advantage of incentives than whites or those with higher incomes.[5]

There is a dearth of research on the cost effectiveness of health promotion and incentive programs. This is due to a lack of standard metrics and, in many companies and states, the lack of resources to track health outcomes and other improvements over an extended period of time.[6] As health care costs continue to rise, more attention is being devoted to measuring ROI.

---

[1] Harvard School of Public Health. "Employer Health Incentives." Winter 2009.
[2] Adam Oliveris. "Do Wellness Incentives Work?" *Health Care Cost Monitor.* The Hastings Center. February 18, 2010.
[3] Ibid.
[4] Paul Fronstin. "Who Might Respond to Financial Incentive That Use Lower Cost Sharing to Change Behavior?" Findings from the 2010 Health Confidence Survey. Employee Benefit Research Institute. *Notes.* December 2010.
[5] Ibid.
[6] Kenneth R. Pelletier, PhD, MD. "A Review and Analysis of the Clinical- and Cost-effectiveness Studies of Comprehensive Health Promotion and Disease Management Programs at the Worksite: 1998-2000 Update." *American Journal of Health Promotion* 2001, 16(2), pp.107-116.

ROI for wellness programs have a broad range. For example, the Wellness Council of America suggests that every $1 invested in wellness programs saves $3 in health care costs.[7] A 2007 survey of practices at 115 companies by Sykes Health Plan Services (SHPS) found a strong correlation between cash-based incentives and reduced health care costs, with an average cost reduction of about 15 percent, or $1,165 per employee.[8] These costs/savings did not include improvements in absenteeism, lost productivity, turnover or recruitment. Lincoln Industries, a Nebraska metal finishing company, offers a comprehensive wellness program with incentives and reports savings of approximately $4,000 per year for every employee who quits smoking plus about $3,000 per year per person in reduced insurance premiums.[9]

In federal fiscal year (FFY) 2011, Wisconsin expenditures for BadgerCare Plus totaled more than $1.7 billion for 744,681 children, parents/other adult caregivers and pregnant women.[10] BadgerCare Plus is Wisconsin's Medicaid program for low-income families. Following rapid growth from 2007 to 2009 as a result of the recession, Medicaid enrollment has remained steady since 2010.

Like businesses, states and their Medicaid programs continue to search for strategies to bend the health care cost curve. Wisconsin's Individual Incentive pilot was designed to increase individual responsibility for personal health and encourage and support healthier behaviors among BadgerCare Plus members over a two-year period. The long-term goal was to reduce health care costs for preventable conditions.

Background

BadgerCare Plus provides health care coverage to children, parents, pregnant women, caregiver relatives, youth aging out of foster care and adults without minor children in the home. The program, administered by the Wisconsin Department of Health Services (DHS), also implemented measures to align improved access to health insurance to quality, including the promotion of prevention and healthier behaviors. The multi-prong approach to both improve the quality of care and, subsequently, health outcomes, focused on five health conditions — well-child or EPSDT (Early Periodic Screening, Diagnosis and Treatment) exams, including immunizations and blood lead testing; management of asthma and diabetes; poor birth outcomes, especially among minority members; smoking cessation; and childhood obesity.

One key component of BadgerCare Plus was the development of both individual and system-level incentives to promote and support improved health outcomes and, over the long-run, reduce health care costs. The projects described in this report tested whether offering financial incentives, such as cash rewards or consumer products to individual members, would encourage them to change their health-related behavior and adopt healthier practices. System-level incentives built on efforts to significantly improve the quality of care through pay-for-performance (P4P) initiatives. Both the P4P initiatives and Individual Incentive pilots focused on improvements in the five targeted health conditions.

---

[7] Tony Zook. "The ROI of Wellness." Forbes.com. http://www.forbes.com/2006/04/21/wellnes-programs-gold-standards-cx_tz_0424wellness_print.html accessed August 16, 2011.
[8] John Cummings. "Finding the ROI in Wellness Incentives." *Business Finance.* http://businessfinancemag.com. August 11, 2008.
[9] Loyaltyworks. "Nebraska company enjoys five to one ROI on wellness initiative." June 14, 2011. accessed August 16, 2011.
[10] Wisconsin BadgerCare Plus Enrollment and Fiscal Data. WI Department of Health Services.

The Individual Incentive Pilots were developed by a diverse stakeholder group with representatives from BadgerCare Plus (Medicaid), public health, health maintenance organizations (HMOs), advocates and the University of Wisconsin-Madison to test innovative approaches to encourage both short and long-term behavior changes. The expert advice provided by the workgroup was supplemented by findings from six focus groups with each composed of current Medicaid members. These groups had two key purposes:

- To solicit information about barriers and facilitators of adopting healthier behaviors.
- To better understand the health care information needs and preferences of low-income individuals.

The focus groups shared barriers to healthier behaviors, identified an array of rewards and incentives that would serve as motivators and offered advice for how to inform individuals about special programs to help them achieve their health goals. Identified barriers included lack of time, the cost of fresh foods and knowledge about how to prepare them, lack of child care (for going to an exercise class) and the influence of family and friends. Suggested rewards/incentives ranged from waiver of co-payments to free exercise classes to sports equipment for their children to cash (no amount was specified). All participants agreed that written material needed to be distinctive, brightly colored, short and easy to read with the most important information boldly identified. All materials should be easily accessible at places where they go on a regular basis, such as schools and grocery stores. Information and materials should also be provided by health clinic staff.[11]

Research Findings

The Pilots were also informed by a review of the literature on individual incentives with a special focus on state incentive projects for Medicaid members. In general, research on incentive programs to promote positive behavior changes suggest that carefully designed incentives that are well marketed are effective in promoting simple behavior changes such as getting a flu shot or having a child immunized. Incentives are less effective in encouraging more complex behavior changes such as quitting smoking or losing weight.[12]

The literature review found two states — Florida and Idaho — that offered incentives to Medicaid members through increased flexibility provided by the Deficit Reduction Act of 2005 (DRA).[13] Two other states — Kentucky and West Virginia — also included rewards for healthy behavior in their Medicaid reform initiatives.[14]

Florida. Florida's Enhanced Benefits Account Program was launched in September 2006 as part of an 1115 Medicaid waiver in five counties. The program provides up to $125 per year to any individual enrolled in one of the reform health plans. Credits are earned by engagement in healthy behaviors – well-child visits, preventative screenings, disease management programs, smoking cessation programs or weight loss programs. The credits can be used at any Medicaid-

[11] University of Wisconsin-Oshkosh Center for Career Development. "BadgerCare Plus Focus Group Report." October 2007.
[12] Kane, et al. *Economic Incentives for Preventive Care.* Evidence Reports/Technology Assessments, No. 101. Rockville: Agency for Healthcare Research and Quality, August 2004.
[13] NGA Center for Best Practices. "Creating Healthy States: Promoting Healthy Living in the Medicaid Program." Issue Brief. National Governors Association: August 4, 2006.
[14] Pat Redmond, Judith Solomon, and Mark Lin. "Can Incentives for Healthy Behavior Improve Health and Hold Down Medicaid Costs?" Washington, D.C.: Center on Budget and Policy Priorities, June 2007.

participating pharmacy for non-Medicaid covered items such as over-the-counter medications, dental supplies and first aid products.[15]

From implementation through April 2008, beneficiaries had earned credits totaling more than $13 million with about $1.6 million (11.4 percent) redeemed for health-related products.[16] Stakeholders reported that the low redemption rate was due to the lack of awareness of the program and how to redeem the credits. Additional marketing strategies were implemented in 2008 which improved the redemption rate.[17] In addition to low redemption rates, an evaluation of the Enhanced Benefits program found high administrative costs, limited credits earned for complex behavior changes such as smoking cessation and little evidence that any behaviors had changed as a result of the program.[18]

Idaho. Implemented in January 2007, Idaho's Preventative Health Assistance (PHA) Program has two components — wellness for CHIP (Children's Health Insurance Program) participants and adult smoking and obesity (behavioral health) for Medicaid members. Under the wellness PHA, participants are rewarded for keeping well-child exams and immunizations up to date. Rewards are used to cover delinquent or current premiums. The most recent statistics indicate that as of February 2010, over 20,000 children had earned rewards for up-to-date exams and immunizations with the rewards paying for $1.5 million in premiums.[19] A quasi-experimental study indicates a 116 percent increase in CHIP children with up-to-date exams and immunizations, compared to a 13 percent increase among children who did not receive the incentives.[20]

The behavioral health PHA provides vouchers that can be used for smoking cessation programs and/or weight management interventions such as Weight Watchers. Points are earned by enrollment in treatment services; the points, in turn, are used to pay for the service.[21] Medicaid data indicates 1,422 participants in the behavioral health PHA in 2009; a small survey showed that some participants were successful in managing their weight and quitting smoking.[22]

Kentucky. Kentucky's Medicaid reform initiative of 2006 included provisions to allow members to earn "Get Healthy" benefits after a year of compliance with a disease management program for diabetes, asthma, pediatric obesity and cardiac care, including keeping appointments or filling

[15] Florida Office of Program Policy Analysis & Government Accountability. "Medicaid Reform: Beneficiaries Earn Enhanced Benefits Credits But Spend Only a Small Proportion." Florida Legislature, July 2008.
[16] Ibid.
[17] Georgetown University Health Policy Institute. "As Legislators Wrestle to Define Next Generation of Florida Medicaid, Benefits of Reform Effort Are Far From Clear." Florida's Experience with Medicaid Reform. Georgetown University, April 2011.
[18] Ibid.
[19] Genevieve M. Kenney and Jennifer E. Pelletier. "Medicaid Policy Changes in Idaho under the Deficit Reduction Act of 2005: Implementation Issues and Remaining Challenges." SHARE Issue Brief. Washington, D.C.: The Urban Institute, September 2010.
[20] Jessica Greene. "Using Consumer Incentives to Increase Well-Child Visits Among Low-Income Children." *Medical Care Research Review.* May 2, 2011.
[21] Kenny, 2010.
[22] Ibid.

medications in a timely manner. The earned benefits can be used for additional services such as smoking cessation, weight loss, gym memberships or paying co-pays.[23]

West Virginia. West Virginia adopted a different approach to promoting healthier behaviors. The state's reform initiative of 2007 included implementation of Mountain Health Choices, a new program of benefits and rewards for low-income parents and children. The program has two benefit plans — basic and enhanced — with enrollment in the enhanced benefit contingent on signing a member agreement with a health care provider promising such things as keeping appointments, using the emergency room only for emergencies and participating in a health improvement plan. Individuals are required to actively select the enhanced plan; those who do not are automatically enrolled in the basic plan.[24] As of February 2009, statewide enrollment in Mountain Choices totaled 149,000 with the majority in the basic plan.[25]

The plan also included a 'Healthy Rewards' component which was not implemented. The rewards program would track use of appropriate health care services and allow individuals to use their reward account for additional services such as vision or dental care or participation in wellness programs. Individuals would lose rewards for inappropriate use of services such as buying a brand name drug when a generic was available.[26]

A summary of key findings from the literature review suggests that:

- Incentives can be an effective tool in encouraging individuals to use simple preventive care – having their child immunized, but have less effect on promoting more complex, sustained behavior changes – eating healthier and getting more exercise.
- To be effective, rewards need to be immediate.
- Positive rewards are more effective than penalties, e.g., reducing benefits for non-compliance.
- The size of the reward matters with larger rewards showing more robust positive outcomes.
- Marketing the rewards is critical to success; the target population must be aware of the incentive program, how to earn the reward and how to use rewards, e.g., Florida's Enhanced Benefit Accounts.

Incentive programs to address prevention received new attention with the release of the federal funding opportunity "Medicaid Incentives for Prevention of Chronic Diseases" in February 2011, authorized by the Patient Protection and Affordable Care Act. The five-year grant from the Centers for Medicare and Medicaid Services (CMS) requires participating states to implement evidence-based individual incentive programs to promote and encourage the adoption of healthy behaviors. Such programs had to address at least one of the following health

[23] Kaiser Commission on Medicaid and the Uninsured. "KYHealth Choices Medicaid Reform: Key Program Changes and Questions." The Henry Kaiser Family Foundation. July 2006. Additional information about Get Healthy accounts, including take-up rates and usage, was not accessible.
[24] Michael Hendryx, et al. "Evaluation of Mountain Health Choices: Implementation, Challenges, and Recommendations." The West Virginia University Institute for Health Policy Research and Mathematica Policy Research. August 2009.
[25] Hendryx. 2009. Latest data available.
[26] Ibid. No additional data about Healthy Rewards was accessible.

conditions: smoking, obesity, high cholesterol and blood pressure and/or preventing the onset of diabetes.[27] Awards totaling $85 million were made to ten states in September 2011.[28]

Project Overview

Based on the research findings and information from the focus groups with BadgerCare Plus members, DHS issued a Request for Applications in December 2007 seeking proposals from the HMOs currently under contract with Wisconsin Medicaid for creative approaches to motivate behavior changes, including the use of individual incentives. Respondents were required to address one of four key domains for improvements – well-child visits, including blood lead screening and immunizations; prenatal and post-partum care; childhood obesity; or smoking cessation. Of the fourteen eligible HMOs, seven responded. DHS awarded two-year grants to six HMOs totaling $597,731 effective April 2008.

Two of the pilots focused on reducing childhood/adolescent obesity, two on increasing well-child visits, one on increasing prenatal/post-partum care and one on increasing blood lead testing. Table 1 presents the highlights of each funded pilot.

Table 1: Healthy Living Individual Incentive Pilots for BadgerCare Plus Members

Health Plan	Project Title	Pilot Location	Amount Awarded
Children's Community Health Plan	Leap to be Healthy: Ameliorating Barriers to Behavior Change among Youth with Pediatric Overweight/Obesity	Milwaukee, Kenosha, Racine and Waukesha counties	$123,914
Dean Health Plan, Inc.	Strong Beginnings: Individual Incentives for Prenatal and Postpartum Care	Madison	$173,817
Managed Health Services Insurance Corp.	Encouraging Healthier Lifestyles & Improving Health Outcomes	Kenosha County	$ 95,000
MercyCare Health Plans	Adolescent Obesity Intervention Project; "Healthy Image" Program	Janesville, Beloit, Rock County	$ 41,410
Security Health Plan of Wisconsin	Two-Year Old Blood Lead Screening Incentive	Marshfield	$ 52,230
UnitedHealthcare of Wisconsin/AmeriChoice	Well Child Visit Incentive Program; "Diaper Rewards" Program	Milwaukee	$111,360

The pilots began in April 2008 and were initially designed to end March 2010. Due to delays in implementation and very low participation rates, four of the sites continued through September 2010. The general population for the incentive pilots was BadgerCare Plus members enrolled in the specific HMO; each HMO further defined the target population.

The pilot project was managed by DHS staff with assistance from designated HMO staff. To ensure the best use of resources, rapid cycle evaluation[29] was used to quickly identify what was

[27] Department of Health and Human Services, Centers for Medicare & Medicaid Services. "Patient Protection and Affordable Care Act, Section 4108, Medicaid Incentives for Prevention of Chronic Diseases." Initial Announcement. February 23, 2011.

[28] Department of Health and Human Services, Centers for Medicare & Medicaid Services. "News Release." September 13, 2011. The ten funded states are California, Connecticut, Hawaii, Minnesota, Montana, Nevada, New Hampshire, New York, Texas and Wisconsin.

[29] Rapid-cycle evaluation or quality improvement, used in various fields from the automotive industry to healthcare, is an iterative strategy which involves setting improvement goals, identifying changes that are likely to lead to improvement, trying them for short test periods and measuring the effectiveness of the changes. Based on what is learned, successful interventions are continued and/or applied to other

working and make quick adjustments when strategies proved less effective. Changes made over the course of the pilot are highlighted in the individual descriptions.

Evaluation Approach and Methodology
The evaluation was conducted by DHS staff in the Office of Policy Initiatives and Budget[30] with assistance from the funded HMOs. Focus groups were conducted in September 2010 with participants from two of the pilots. Participant surveys were distributed to individuals in three of the pilot projects.

The key purpose of the demonstration projects was to test whether individual incentives — sports equipment, free diapers, gift certificates — motivate targeted BadgerCare Plus members to adopt healthier behaviors. The Individual Incentive workgroup developed seven questions about the topic of incentives generally. The evaluation was designed to answer these questions based on the results for each project and for the initiative as a whole. The questions were:

1. Do the incentives offered have the intended effect on healthy behavior?
2. What types of incentives are effective and at what levels?
3. How does effectiveness vary depending on member characteristics?
4. What are the administrative and management considerations in implementing individual incentive programs?
5. What short-term health outcomes result from engagement in these programs?
6. What are the prospects for long-term improved health outcomes?
7. Is adoption/implementation of individual incentive programs cost effective?

Each project was required to identify both short and long-term goals and objectives. Specific measures to be tracked by each participating HMO were negotiated as part of the original contracts. Data on these measures were reported quarterly as were any changes made to the project. Two annual reports were also submitted. Results from each project were supplemented by interviews with HMO project staff, by findings from focus groups and participant surveys.

DHS' external quality review organization, MetaStar, reviewed the validity and reliability of each project's measures and data collection strategies. They also offered suggestions for improvements in design/processes, as needed.

In addition to addressing project outcomes, the evaluation documents implementation challenges and subsequent project changes. It also generalizes individual project results to the larger policy issue of whether incentives are an effective tool for motivating behavior changes in low-income populations.

Overview of Project Design and Activities
The six projects differed in their choice of target groups, interventions, incentives and process and outcome measures. Highlights of the design of each project are presented in Table 2.

---

settings and unsuccessful ones are revised and tested again for effectiveness. Langley G, Nolan K, Nolan T, Norman C, Provost L. The Improvement Guide: A Practical Approach to Enhancing Organizational Performance. Jossey-Bass Publishers. San Francisco, 1996.

[30] The Office of Policy Initiatives and Budget is an enterprise level office responsible for policy analysis; conducting program evaluations, and preparing and monitoring the agency's biennial budget.

Table 2: Design of the BadgerCare Plus Individual Incentive Projects

HMO	Goal	Target Population	Intervention	Incentive
Children's Community Health Plan	To reduce childhood obesity.	Youth ages 8-18 with BMI at or above 85th percentile.	Ten-week intervention; families randomly assigned to control/ treatment groups; multi-disciplinary team-clinical psychologist, dietician & physical therapist; family contract.	Transportation vouchers, stipends for attendance, fresh produce baskets, vouchers for athletic equipment and shoes, YMCA membership, gift cards for family members.
Dean Health Plan, Inc.	To increase timely prenatal and post-partum care.	Pregnant and post-partum women.	Active outreach, individual health assessments, personal contact, help in scheduling appointments and referrals to other services, free prenatal classes.	Gift cards of $25 for initial prenatal visit, $25 for post-partum visit, entries into cash drawings for ten $100 rewards based on subsequent visits, completion of classes and completion of a health assessment.
Managed Health Services, Insurance Corp.	To increase well-child exams and identify children at risk of obesity.	Children ages 2-12 in Kenosha County (primarily Latino population).	Bi-lingual well-child exams, active outreach to members, providers and community-based organizations, referrals to child nutrition programs (e.g., WIC) and organizations provided physical activities.	$20 cash incentive for keeping appointment, additional $20 if child obese and agreed to participate in follow-up program; $10 if child kept food diary for one month and completed follow-up appointment.
MercyCare Health Plans	To reduce childhood obesity.	Youth ages 12-17 with BMI in the 85th percentile.	PCP referrals, active outreach, multi-disciplinary team-exercise physiologist, counselor, dietician; medical monitoring; individual and family counseling.	Gas cards; movie tickets for each visit with specialists plus choice of iPod shuffle w. iTunes card or gift certificate for electronic dance pad or clothing.
Security Health Plan	To increase blood lead screenings.	Toddlers age two.	Special mailing sent in month prior to member's 2nd birthday about the importance of the screen and the incentive.	$25 gift card upon completion of screen.
United Healthcare of WI	To increase well-child visits.	Mothers who delivered and babies 0-1 year old.	Post-partum packet with postcards to be signed at each well-child visit; initial letter required mother to register, customer care representative made call to explain importance of visits and the incentives.	Coupon for jumbo pack of Pampers sent upon registration, at post-partum visit, and for each of the four well-child visits; $20 gift card if all appointments kept.

HIGHLIGHTS OF FINDINGS—ALL PROJECTS

The following section summarizes findings from the six projects in several areas: a) methods used to identify and recruit members; b) project enrollment, participation and completion; and c) the effect of incentives on behavior change. Results from each project are then reported separately, followed by an overall discussion and conclusions.

Identification and Recruitment of Targeted Members

Table 3 summarizes findings related to identifying eligible BadgerCare Plus members and recruiting them to participate in the project.

Table 3: Project Highlights Related to Identification and Recruitment

Project/ HMO	Identification Methods for Target Population	Recruitment Methods	Results/Lessons Learned
Children's Community Health Plan	▪ Paid claims with a diagnosis of obesity ▪ Provider referrals	Telephone calls and information packets to new HMO members with children in the target age range.	Most participants were identified using claims data. Still, these data also identified as eligible some youth who were no longer enrolled in BadgerCare Plus or the HMO, or who could not be contacted. Extensive outreach to physicians yielded only three referrals.
Dean Health Plan	▪ Enrollment records ▪ DHS Health Needs Assessment ▪ Provider referrals ▪ Referrals by prenatal care coordinators, Customer Service & Case Managers ▪ Hospital birth records ▪ Electronic Health Records ▪ Whitepages.com (internet directory)	Introductory letter and brochure mailed to pregnant and post-partum BadgerCare Plus members; members also received telephone calls. Women who did not opt out were automatically enrolled.	Initial phone calls to recruit women were not very successful. Women did not always understand or respond positively to "cold calls" from project staff; adjusted to send introductory letter describing the program and telling them to expect a call. Phone numbers for many women were invalid, and thus they were initially unreachable by phone.
Managed Health Services	▪ Enrollment records ▪ Provider referrals ▪ Referrals from community groups	Telephone calls and direct mailings to families with children in the target age range.	Despite significant outreach, recruitment fell short of goals; some success contacting and scheduling children for appointments, but was less successful in getting them to complete HealthCheck exams or engage in obesity-reduction activities; many 'no shows' for scheduled exams despite reminder calls and the incentives.
MercyCare Health Plans	▪ Provider referrals ▪ Diagnosis codes indicating obesity (from paid claims and electronic health records)	Information mailed to families with children identified as eligible.	More than 90% of families who expressed interest in the program were identified by claims; less than 10% were referred by physicians.
Security Health Plan of WI	▪ Birth records ▪ HMO records	Information packet mailed to parents prior to their child's	Eligibility was often hard to determine; some families joined the HMO after their child's birth, thus, the HMO did not have

Project/ HMO	Identification Methods for Target Population	Recruitment Methods	Results/Lessons Learned
		second birthday.	a birth record. Initial slow take-up for screenings; follow-up calls to parents indicated that many threw the packet away thinking it was unimportant; packet was redesigned to catch parents' attention more easily. Parent education was critical.
United Healthcare of WI	▪ Referrals from case managers for pregnant members ▪ United's utilization management system	Information packet in English or Spanish was mailed to mothers.	United easily identified eligible women and children, via case managers working with expectant mothers.

All of the projects utilized multiple sources of information to identify potential participants, and most attempted to reach individuals by both mail and telephone. Overall, very few people were referred by primary care providers or other health care staff. While HMO membership lists, claims/encounter data and other administrative data sources served to identify the greatest number of targeted members, these sources of information were not without their own problems — such data was often incomplete or out-of-date — and thus additional time and effort was needed to locate and engage members using this information.

The data indicates that identification and recruitment required a multi-pronged approach. Secondarily, projects also needed to adapt their processes over time due to unanticipated barriers, e.g., members had moved, telephone numbers had changed, individuals were no longer enrolled in the HMO or BadgerCare Plus.

Project Enrollment, Participation and Completion

Table 4 briefly summarizes project findings related to enrollment, participation and project completion.

Table 4: Project Highlights Related to Enrollment, Participation and Completion

Children's Community Health Plan	3,462 were identified 226 expressed interest 55 participated 44 completed the program
Dean Health Plan	3,400 were identified 1,976 were contacted 1,708 participated
Managed Health Services	1,845 were identified 1,545 were contacted 527 agreed to attend 354 attended
MercyCare Health Plans	591 were identified/expressed interest 31 agreed to participate 13 completed (another 3 were still active at end-of-project)
Security Health Plan	3,429 were contacted 813 lead screenings were completed
UnitedHealthcare	10,716 were contacted 4,008 participated 1,595 completed well-child visits

These pilot projects found that enrolling and retaining participants are as challenging as achieving the desired behavior change. HMO staff dedicated a lot of time and energy in the front-end process of identifying and contacting individuals in the targeted population. Even with extensive, personal outreach, all projects had difficulty in engaging members in the intervention, despite the availability of incentives. Two projects met their enrollment goals.

The Effect of Incentives on Behavior Change

The following table summarizes project activities and findings related to the effects of incentives on behavior change.

Table 5: Project Highlights Related to Effects of Incentives on Behavior Change

Project	Incentives	Results/ Lessons Learned
Children's Community Health Plan	For participation and goal achievement – parents and children ▪ Gas cards ▪ Fresh produce baskets ▪ Gift cards ▪ $50 vouchers for athletic equipment ▪ YMCA/YWCA memberships	Outcome data were not reported; families and children reported meeting short term goals, e.g., getting more exercise, eating more fruits and vegetables, and drinking less soda; participants indicated that incentives were a good motivator and found educational information equally valuable.
Dean Health Plan	For initial prenatal and postpartum visits; other prenatal visits and attending education classes ▪ $25 gift card ▪ Entry for $100 drawings	Met goal of increasing the HEDIS rate for first trimester prenatal visits; did not meet goal for HEDIS postpartum rate. Availability of incentives had very limited impact on seeking care; majority of women stated they kept prenatal/postpartum visits for their health and the health of their baby.
Managed Health Services	For getting well-child exam and participating in obesity prevention activities; included provider incentive to report BMI ▪ $20 gift card ▪ Entry in $250 drawing ▪ Free nutrition counseling ▪ Free family meals ▪ Small sports equipment ▪ Memberships for athletic clubs ▪ Educational sessions	Availability of incentives insufficient to motivate parents to keep appointments for well-child exams; implementation of quarterly drawings had slightly larger impact; some improvement in engagement in educational program that targeted the entire family, including a meal and physical activities; no recorded change in weight or BMI during the project's first year 1; data not recorded for year 2; families reported a few minor changes in children's physical activities after participating in the educational program.
MercyCare Health Plans	For participation and completion of required education, counseling and activity session ▪ Gas cards - $7-10 ▪ Day pass to the YMCA or other local health clubs ▪ iPod Shuffle or dance pad	Mixed effects on weight and BMI; 31 children participated; 13 (42%) completed all sessions; of these 6 (46%) lost weight and 7 (54%) gained weight.; participants met short-term goals, e.g., eating healthier foods and being more active; incentives were important motivator for parents and children.
Security Health Plan of WI	For getting blood lead screening ▪ $25 gift card	Screening rate increased slightly, from 59.7% in 2007 to 60.2% in 2008 and 68.1% in 2009; well below the target of 90%; unable to measure impact of incentive; parents appreciated educational information.
United HealthCare of WI	For completing postpartum visit and 4 well-child exams ▪ Jumbo pack of Pampers for each visit	Met one of two short-term goals - the HEDIS Well-Child Visit rate increased from 42.1% in 2007 to 47.0% in 2008 (above the target rate of 46.6%) and

Project	Incentives	Results/ Lessons Learned
	▪ $20 gift card if all exams completed	to 47.5% in 2009 (below the target rate of 56.6%); ~10% of identified mothers earned the incentive.

These results are consistent with other research in finding limited and inconclusive support for the premise that incentives promote healthier behavior. Results from the focus groups and participant surveys indicate that a small group of participants who completed the interventions made small changes in their lifestyles, e.g., increased physical activity and improved their nutrition.

FINDINGS FROM THE PROJECTS

Children's Community Health Plan

Project Name: *LEAP to be Healthy: Ameliorating Barriers To Behavior Change Among Youth With Pediatric Overweight/Obesity*

Target Population: Youth ages 8-18 identified as overweight, obese or morbidly obese in Milwaukee, Racine, Kenosha and Waukesha counties

Description

Children's Community Health Plan (Children's) "LEAP[31] to be Healthy" project focused on BadgerCare Plus families with youth ages 8-18 who were identified as overweight, obese or morbidly obese from Milwaukee, Racine, Kenosha and Waukesha counties. Dean Health Plan Southeast BadgerCare Plus families were added to the target population in early 2009.

The project was a joint effort between the two HMOs, the Medical College of Wisconsin (MCW) and their NEW Kids™ Program at Children's Hospital of Wisconsin, a multi-disciplinary clinic designed to treat overweight and obese youth.[32] HMO staff was responsible for identification and recruitment with treatment, record keeping and dissemination of incentives provided by the NEW Kids staff. The project was initially designed as a research study with a pediatric psychologist from the MCW assisting in the design and providing oversight of the study.

Potential participants were identified via paid claims with a diagnosis of obesity. An initial letter was sent with a return postcard for those seeking additional information about the project. Staff from Children's then made telephone calls to explain the program in more detail. Children's provider network was also informed about the project through a variety of mechanisms and encouraged to refer their obese patients.

The intervention called for families to participate in 10 weekly group sessions covering nutritional education, weight management and physical activities. The sessions were led by a multi-disciplinary team, including a clinical psychologist, dietician and physical therapist.

[31] LEAP is an acronym for Learning, Eating and Activity Patterns.

[32] The Nutrition, Exercise and Weight Management (NEW) Kids Program provides holistic treatment of pediatric overweight by coordinating the efforts of nurses, nurse practitioners, psychologists, dietitians, exercise physiologists, physical therapists and physicians. Established in 2003, its primary focus is on improving the health of overweight children with other medical problems with treatment recommendations tailored to each child's needs.

Evaluation Goals, Measures and Data Sources

The primary goal of LEAP to be Healthy was to reduce childhood obesity via a series of carefully designed educational sessions for children and their families and an incentive structure that rewarded participation and goal achievement. The initial design (summarized in Table 6) called for a comparison of two experimental conditions. Families in Condition A (attendance) were to receive incentives for attending the 10 sessions, while Condition A + G (attendance plus goal attainment) were expected to receive the same attendance incentives plus additional incentives for returning self-monitoring surveys and attaining at least one of their weight management goals. It was expected that families in Condition A + G would be more likely to develop healthy eating habits than families in Condition A. Half of the families — divided between the two experimental conditions — were expected to participate during the third quarter of 2008 and the remaining families, also divided between the two conditions, were expected to participate during the fourth quarter. Based on this research design, 80 families were to be randomly assigned to four groups of 20 families each, as represented in Table 6.

Table 6: Children's Initial Design Summary

	Condition A: Attendance	Condition A+G: Attendance + Goal Attainment
Third Quarter 2008	Group 1, $564 possible	Group 2, $714 possible
Fourth Quarter 2008	Group 3, $564 possible	Group 4, $714 possible
Each Group was designed to have 20 randomly assigned families, 80 families total.		

The structure of the incentives was designed to both reward participation and achievement of small steps toward healthier behaviors. The potential value of the attendance incentives in Condition A totaled $564. The incentives were: a stipend of $20 for attending each of 10 sessions ($200 possible); a basket of fresh produce from Milwaukee's Growing Power for attending four of the first five sessions; a $15 athletic equipment voucher for youth who attended four of the first five sessions; a three-month family YMCA membership for attending eight of the ten sessions; and an additional $50 athletic voucher for youth who attended eight of the ten sessions. Attendance incentives were distributed following each session.

The total value of the possible incentives for the Condition A+G families was $714. In addition to the incentives described above, families in Condition A+G (Groups 2 and 4) were eligible to receive up to $150 in grocery gift cards for returning self-monitoring surveys and for attaining weight management goals at selected time intervals. All families who participated were provided with transportation vouchers, as needed.

The intervention also included a "healthy living" pledge/family agreement. This tool was designed to stress the important role that each individual and family plays in their own health, the available incentives and services to be provided by NEW Kids. The document was reviewed with each family and each was asked to sign the non-binding agreement.

At the initial meeting, demographic information as well as children's heights, weights and Body Mass Index (BMI)[33] were documented. Sessions 2-9 were for structured physical activities, nutritional education and psychosocial intervention designed to create behavioral change conducive to physical activity and healthy eating habits. Children's heights and weights were also recorded at each of these sessions.

[33] Body Mass Index (BMI) is a number calculated from a person's weight and height, standardized for age and sex, which is a reliable measure of body fat commonly used as a health indicator.

Project Activities and Results

The project experienced a number of delays and implementation issues. The first substantial delay resulted from the planned research design involving random assignment of families to different experimental conditions. As such, it required approval by Children's Hospital's Human Research Review Board (CHW-HRRB). The study was submitted to CHW-HRRB in May 2008. The Board requested several changes to the consent process and the study protocol, prohibited program staff from telephoning families if they had previously been sent an introductory letter about LEAP to be Healthy, and refused to allow a financial incentive payment to providers for referrals since they believed these recruitment strategies might be considered coercive. Final approval from CHW-HRRB was received in August 2008.

Other issues also delayed implementation. First, the use of claims data resulted in identification of some potentially eligible youth who were no longer enrolled in BadgerCare Plus or the HMO or could not be contacted. Second, all modifications to the project, including changes to the recruitment process, required the approval of CHW-HRRB. Third, the pediatric psychologist left MCW in August 2009 resulting in a delay of the second scheduled series. Fourth, recruitment via referrals from physicians was unsuccessful with only three referrals made to the project in spite of extensive outreach to network providers.

With the departure of the lead researcher, Children's decided to eliminate the research component, including the comparison of the randomly selected families in Conditions A and A+G, with all families eligible for incentives based on both attendance and goal attainment. This change made it much easier to recruit children and their families since the strict follow-up protocol did not need to be followed.

To address recruitment issues, HMO staff attempted to call all member families with children ages 7 to 17, screen them for height and weight during the call, and use the results to determine if families might benefit from participation in LEAP to be Healthy. Information packets were also sent to over 2,700 identified families and a brochure about the project was mailed to all new members as part of their HMO welcome packet. As indicated in Table 7, the targeted recruitment using specific obesity codes produced the best response, even though many of these families failed to enroll in LEAP to be Healthy. The additional outreach efforts greatly improved recruitment with 43 children beginning the second session and 35 completing the series.

HMO staff also did extensive provider outreach. These efforts included a cover story in the monthly Provider Newsletter; individual telephone calls to primary care physicians of identified children; posting information on the HMO provider web site; and a special mailing to in-network pediatricians, family practioners and adolescent medicine providers. These activities resulted in only three referrals.

Table 7: Children's Identification and Recruitment Activities

Strategy/Quarter	Members Identified	Members Expressing Interest	Percentage
Paid claims – Oct 2008	151	16	10.6%
Paid claims – Jan 2009	160	33	20%
Provider outreach – Jan 2009	3	3	3%
Paid claims – April 2009	212	44	21%
Paid claims – July 2009	212	65	31%

Strategy/Quarter	Members Identified	Members Expressing Interest	Percentage
Provider outreach – July 2009	0	0	0
Member mailing – Aug 2009	2724	65	2.4%
Totals	3462	226	6.53%

The first series of LEAP group sessions started on February 18, 2009 with 12 families — six families were assigned to Condition A and six to Condition A+G. This group included 12 children — nine males and three females, ages 9 through 17. Nine of the 12 families consistently attended the 10 weekly sessions. Thus, the first session achieved about 22.5 percent (9 of 40 families) of the expected participation. The project did not report outcome results for these sessions, but as reflected in Table 8, a majority of those participating met their short-term goals such as drinking fewer high calorie beverages, getting more exercise and making healthier food choices. Total incentives paid to Group 1 were $4,505. Each of the participants signed the family agreement.

Table 8: Incentives Paid to LEAP to be Healthy Participants

Incentive	Number	Amount	Total
Group 1:			
Cash awards	86	$20	$ 1720
Athletic equipment gift cards	8	$15	120
Athletic shoe gift cards	7	$50	350
Fresh produce baskets	9	$18	162
Three-month Y membership	6	$240	1440
Goal Achievement			
—Grocery gift cards	7	$50	350
—Grocery gift cards	7	$75	525
Total incentives—Group 1			$ 4505
Group 2:			
Cash awards	190	$20	$ 3800
Athletic equipment gift cards	31	$15	465
Athletic shoe gift cards	34	$50	1700
Fresh produce baskets	31	$18	558
Three-month Y membership	29	$190	5510
Goal Achievement			
—Grocery gift cards	9	$25	225
—Grocery gift cards	5	$50	250
—Grocery gift cards	51	$75	3825
Total incentives—Group 2			$16,333

The second series of LEAP sessions began on October 7, 2009 with 43 children. Eight children dropped out within the first two to four weeks, leaving 35 children in 30 families who participated in most of the 10 sessions and received incentives. Participants included 17 males and 18 females, ages 8 through 17. This represents 75 percent of the 40 families planned for, or 85 percent of the 40 children targeted. Again, no specific outcome data was recorded, but children and families reported meeting their short-term goals, e.g., getting more exercise, eating more fruits and vegetables and drinking fewer sodas. A satisfaction survey was distributed to these participants and the results are discussed below. As indicated in Table 8, a total of $16,333 was paid to Group 2. Each of the 35 participants signed the family agreement.

Satisfaction surveys were distributed to participants in the second group — one for parents/guardians and one for children. The brief survey asked questions about satisfaction with the content of the sessions and with the incentives as well as questions about the importance of various items in their decisions to make changes in eating and activity patterns. Sixteen adults and 19 children responded to the survey with the majority expressing strong satisfaction with the content of the sessions and with the rewards that were given for participation and goal achievement. The majority also indicated that the information they learned during the series was very important and that the incentives were a good motivator for them — both parents and children. One youth suggested that the program be implemented in his school "so all kids could learn what he did."

Summary and Conclusions
The LEAP project had ambitious objectives which were a primary factor in approval of the application for funding. The research design that separated it from other incentive projects, and which could have yielded valuable information, as well as the loss of the project director and lead researcher midway through the project, caused substantial delays and led to fundamental modifications to the project design.

While the project did not meet its stated goals, it did succeed in identifying and recruiting families with obese children to participate in a series of educational and physical activity sessions to learn about obesity and steps for healthier lifestyles. In the wrap-up session of the second group, families were asked to identify key themes that they learned during the series. The majority of comments focused on the importance of eating healthier foods and the need to turn off the television and be more active. One mother reported that her ten-year-old son now used his yoga mat every day without being reminded. Thus, the small group of families who participated reported positive experiences, both in their satisfaction survey responses and the final intervention session.

Dean Health Plan, Inc.

Project Name:	*Strong Beginnings: Individual Incentives for Prenatal and Postpartum Care*
Target Population:	BadgerCare Plus members who were pregnant or new mothers

Description
The Dean Health Plan (Dean) Strong Beginnings project used intensive outreach plus cash incentives to increase the rate of timely prenatal and postpartum visits and to encourage participation in prenatal education classes. The project's target population was BadgerCare Plus members who were pregnant or new mothers.

Strong Beginnings was administered by the Dean Strong Beginnings Coordinator, who began work in July 2008. Outreach and enrollment began as scheduled in May 2008. The first quarter was used to refine the contact process and recruit participants.

Eligible HMO members were initially identified from several sources: 1) MEDSTAT codes from enrollment records; 2) DHS Health Needs Assessment for new members;[34] 3) identification by

[34] The Health Needs Assessment is a simple survey that is completed at the time of application for BadgerCare Plus to determine the individual's health status and any immediate needs, e.g., the applicant is pregnant.

Dean providers and prenatal care coordinators; 4) Dean Customer Service, Case Management and Concurrent Review staff; and 5) hospital birth records for postpartum services. The project coordinator also utilized Dean's electronic health record system and Whitepages.com, an internet telephone directory, to locate potentially eligible women.

Once identified, recruitment was done via telephone calls to pregnant and postpartum BadgerCare Plus members. Unless they specifically stated they did not wish to participate, women were sent a general introductory letter and program brochure with women who agreed to participate receiving more detailed information. All women who did not specifically opt out were enrolled. Contact efforts for a targeted person ceased if no telephone contact was made after three tries and when information packets were returned by the post office as undeliverable.

Minor adjustments were made during the first two quarters to address unanticipated problems and improve the recruitment process based on member feedback. For example, women did not always understand or respond well to the first "cold call." Staff thus began sending the introductory letter highlighting Strong Beginnings, including the availability of incentives, and asking them to expect a call from program staff. Second, a large number of women were initially unreachable after three calls due to invalid telephone information. In July 2008, staff began sending the complete information packet to these "no contact" women — this resulted in 45 women who returned incentive cards or signed a "Healthy Living Pledge."[35]

Pregnant members who expressed an interest in Strong Beginnings were given a brief health assessment during the phone call and offered assistance in scheduling prenatal and postpartum appointments and referrals to other services, as needed. The cash incentives were also described during the initial call and in the information packets. Rewards were based on making and keeping prenatal or postpartum appointments with confirmation by the providing physician. The incentives included:

- $25 for the first prenatal care visit made within the first trimester.
- $25 for the first visit for women whose first prenatal care visit occurred within 42 days of their enrollment with Dean Health Plan.
- $25 for completion of a postpartum visit within 21-56 days following delivery.
- Entries into raffles offering $100 cash prizes for attending additional prenatal appointments and prenatal classes.
- An extra raffle entry for the $100 prize for signing the Healthy Living Pledge.

Evaluation Goals, Measures and Data Sources
The principal outcome measures set by Dean for Strong Beginnings were the calendar year (CY) 2008 and 2009 Healthcare Effectiveness Data and Information Set (HEDIS) participation rates for first trimestar prenatal visits and for postpartum visits made between 21 and 56 days after delivery.[36] The outcome goals for Strong Beginnings were to increase the Medicaid prenatal rate to 81.2 percent and the postpartum rate to 80 percent by the end of 2009.

[35] The Strong Beginnings Healthy Living Pledge was a voluntary form that outlined the member's responsibilities, e.g., keeping appointments, quitting smoking, following medical advice, and the responsibilities of the HMO, e.g., providing smoking cessation assistance, providing educational classes free of charge and ensuring access to providers.
[36] HEDIS performance rates are a measure created by the National Committee for Quality Assurance (NCQA) and are used by over 90 percent of health plans nationally to measure, and improve, service

The principal process goal of Strong Beginnings was to contact 80 percent of eligible BadgerCare Plus members to explain the program and conduct a brief assessment. Additional goals were quarterly increases in various activities, e.g., in the percentage of women who sign and return the Healthy Living pledge and quarterly increases in the percentage of women participating in both prenatal and postpartum educational programs.

National HEDIS comparison standards for Medicaid women were obtained at the NCQA website from the 2010 report.[37] Dean HEDIS results for its Medicaid prenatal and postpartum populations were reported by the project. The data used to measure performance and activity were provided in the project's quarterly reports.

Data describing and summarizing the project's activities covered seven quarters — from July 1, 2008 through March 31, 2010. Fiscal data regarding incentive payments were taken from the project's final fiscal report. In addition, a focus group was conducted in July 2010 and a short survey of former participants was conducted; findings from these activities are described below.

The principal performance goals set by Dean were:

- To increase the rate of Badgercare Plus members beginning prenatal care during the first trimestar (or within 42 days of Dean enrollment) to meet or exceed the NCQA 2006 national average of 81.2 percent in 2008-2009.
- To increase the rate of Badgercare Plus members receiving postpartum care within 21-56 days of delivery to meet or exceed the NCQA 2006 national average of 80 percent in 2008-2009.[38]

Project Activities and Results

The results for prenatal visits in Table 9 show that Dean increased its HEDIS rate prior to launching Strong Beginnings.[39] The rate increased another 9.5 percent (to 90.7) in 2008 before falling slightly in CY 2009. Calendar years 2008-2009 represent seven quarters of Strong Beginnings activity. Thus, Dean reached its performance target in 2007, and exceeded the target by an additional 9-10 percentage points after Strong Beginnings was implemented. Since enhanced outreach efforts were instigated in 2006, the 11.7 percent increase for 2008 is most likely attributable to this rather than the availability of incentives.

---

quality. For new Plan members past their first trimester, a prenatal visit within 42 days after enrollment is counted toward the rate.

[37] National Committee for Quality Assurance. The State of Health Care Quality 2010. available online at http://www.ncqa.org/Portals/0/State%20of%20Health%20Care/2010/SOHC%202010%20-%20Full2.pdf

[38] The Medicaid postpartum national average in 2006 was 59.1% and the commercial payer average was 79.9%.

[39] Rates are calculated and available in June of the following year calendar year, thus Dean's 2007 rate was not known during the application process.

Table 9: Dean Prenatal HEDIS Baseline and Results by Calendar Year

Prenatal care during first trimestar (HEDIS) by Year	2004	2005	2006	2007	2008	2009
Pregnant BC+/MA women receiving prenatal care in the first trimestar[40]	71.6%	69.1%	69.5%	81.2%	90.7%	89.8%
NCQA Quality Compass Medicaid national average[41]	78.2%	79.6%	81.2%	81.5%	81.9%	83.4%

With the launch of Strong Beginnings in April 2008, Dean implemented new methods for identifying BadgerCare Plus pregnant women as well as intensified outreach strategies (e.g., telephone calls, mailings). These efforts were paired with cash rewards for making and keeping timely prenatal appoinments. In comparison with the 2007 outreach only, this project period can be characterized as intensified identification and outreach plus cash incentives.

It is not possible to distinguish whether the increases in 2008 and 2009 were associated with or attributable to the incentive only, the new intensified identification and outreach process only or a combination of both. Distinguishing between the effects of the two factors and/or gauging their relative impact would have required a controlled experiment using random assignment of Medicaid women to different treatment conditions.

The postpartum participation goal set by Dean was 80 percent by the end of 2009. Table 10 shows the results for postpartum participation. As with prenatal care, there was a rate increase from 2006 to 2007, before the project began, associated with increased outreach in 2007. The issue discussed above for the increase in prenatal HEDIS rates, between incentive and intensified identification and outreach, also exists for the postpartum rates.

In 2009, the postpartum rate fell by seven percentage points, despite the Strong Beginnings project. This result was unexpected in light of the increase that occurred in 2008, and the fact that postpartum identification and telephone activity levels in the second year remained as high as during the first year.

Table 10: Dean Postpartum HEDIS Baseline and Results by Calendar Year

Timely Postpartum care visit 4 to 6 weeks after delivery (HEDIS) by Year	2004	2005	2006	2007	2008	2009
BC+/MA mothers receiving timely Postpartum care	54.9%	65.2%	64.9%	72.2%	76.9%	69.8%
NCQA Quality Compass Medicaid national average[42]	56.5%	57.2%	59.1%	58.6%	62.6%	64.1%

The principle process goal of Strong Beginnings was to contact 80 percent of eligible BadgerCare Plus members to explain the program and to conduct a brief health assessment. Table 11 shows the number of pregnant women identified and contacted, and the number of Medicaid births to Dean BadgerCare Plus members from July 1, 2008 through March 31, 2010. The project nearly attained its goal of 80 percent participation in 2008 after implementing the intensified identification and outreach process and incentives; the 2008 rate was 76.9 percent.

[40] Dean Health Plan, internal data.
[41] National Committee for Quality Assurance. The State of Health Care Quality 2010. available online: http://www.ncqa.org/Portals/0/State%20of%20Health%20Care/2010/SOHC%202010%20-%20Full2.pdf
[42] Ibid.

Table 11: Dean Prenatal Identifications, Contacts and Medicaid Births

	Total	Quarterly Average	Percent Contacted
Pregnant members identified	**3,163**	**452**	
Pregnant members contacted	1,848	264	58.4%
Were enrolled	(1,593)	(228)	
Opted out	(255)	(36)	
Not contacted or no response obtained	1,315 *	188	
Members giving birth based on Medicaid claims	2,017	288	91.6%
Members giving birth based on all sources	2,258	323	81.8%

*Forty-five of these women eventually returned a rewards tracker card due to the "no contact" mailing started in July 2008.

As indicated, 1,848 of identified women were contacted; 255 opted out and 1,593 were enrolled. This represents a contact rate of 58.4 percent, well below the anticipated goal. However, there was a large number (1,315) who could not be contacted; many because they were no longer in the HMO or on BadgerCare Plus, had moved or had already had their baby. Forty-five of the women who were initially unable to be contacted eventually participated in the program based on their returned incentive cards.

The Strong Beginnings staff also made 9,594 telephone call attempts during the 21 month project period, an average of 457 per month, or about three attempts for each of the 3,163 unique pregnant members identified.

All women contacted during their prenatal period were informed about the availability and value of postpartum services and the additional $25 reward for scheduling and attending a postpartum visit within 21-56 days of delivery.

In addition, the program identified another 237 women who had given birth who likely joined Dean after their delivery. Of these, 128 (54 percent) were successfully contacted, while 109 (46 percent) were not. The contact rate for this group was about the same as the 58.4 percent rate observed for all pregnant members. Only 13 women who were contacted (10.2 percent) declined to participate in the postpartum care component.

Table 12 shows the incentive data for the grant period. A total of 257 women returned their tracker card to claim their gift cards. Of these, 220 reported the required prenatal visit within the specified time frame and qualified for the $25 reward. This means that about 85 percent of the members who returned their tracker card successfully earned the incentive by making and keeping their prenatal visit.

Table 12: Dean Prenatal and Postpartum Incentives

Incentive Activity	Total	Average per Quarter
Total prenatal cash incentive tracker cards submitted	**257**	**37**
Members who earned the prenatal cash incentive	220	31.4
1st prenatal appointment in 1st trimester	(168)	(24)
1st prenatal appointment within 42 days of enrollment	(52)	(7.4)
Total postpartum cash incentive tracker cards submitted	**197**	**28**
Members earning the postpartum cash incentive (appointment between 21 & 56 days after delivery)	192	27
Members who did not earn the postpartum care incentive	5	<1
Members who did not earn the prenatal care incentive	39	5.6

The results in Table 12 apply to all women who were eligible for the postpartum incentive, including women originally identified during the prenatal phase, and the "newly identified" postpartum women discussed above. The results show that 192 women received the postpartum incentive by making and keeping their appointment.

The Strong Beginnings project distributed a total of $11,050 in incentives to prenatal and postpartum participants through September 30, 2010. This amount was substantially below the amount that was estimated based on the number of women who kept their appointments as indicated by the HEDIS rates.

Focus Group and Survey Results

Individuals for the focus group were recruited from the list of Strong Beginnings participants who had delivered their babies. The invitational letter was sent to more than 100 women asking them to call the Coordinator if they were interested in attending a group discussion about the program. Each member was informed that child care and lunch would be provided as well as a $50 check for their participation. Dean accepted the first 20 members who responded. Fourteen women attended the focus group.

All participants willingly shared their opinions about a variety of pregnancy-related issues, including Strong Beginnings. Significant findings from the discussion and comments follow.

- More effort seemed to be needed to market Strong Beginnings to the targeted population. Suggestions were made about having brochures at places where they regularly go such as the WIC[43] clinic and Planned Parenthood.
- The cash incentives did not appear to have much influence on whether women got early prenatal and/or timely post-partum care. Rather, this group repeatedly stated that they went to their appointments because they knew it was good for them and their baby.
- If incentives are offered in the future, better strategies are needed for informing members of this opportunity and for making the reward immediately available. One participant commented that "(Y)ou shouldn't have to wait two months to get your check."
- The free prenatal classes were important and should be continued, but should be better advertised.
- Clinics should encourage women to make several prenatal appointments at one time.

[43] The Women, Infants and Children Supplemental Nutrition Program which serves low-income pregnant women, new mothers and children up to age five.

Participant feedback about Strong Beginnings was also gathered via a short survey. The survey was mailed to 1,411 women who participated between April and December 2009 with a self-addressed, post-paid return envelope. Only 93 women returned a completed survey, a response rate of about 7 percent. Most of the survey questions required respondents to select one or more alternatives from a list of designated responses. For a few questions, respondents were asked to write a text response.

Forty-four percent of the respondents remembered getting a letter or a phone call about Strong Beginnings and most thought the amount of outreach was about right. In response to a question about the importance of the cash reward in encouraging regular prenatal and postpartum care, 36 women (43 percent) said the cash was less important than other reasons and 20 women (21 percent) said that the cash was equal or more imporant than other reasons for getting care. Like the focus group, the majority of women reported that the primary reason they got prenatal care was concern about the baby's health and/or their own health (87 percent and 78 percent, respectively).

Despite the opportunities to obtain cash rewards and other incentives, relatively few of the survey respondents reported seeking the cash or participating in the activities necessary for the chance to win other incentives (i.e., the raffle). Thirty-one women (33 percent) returned the first card for the $25 and 29 women (31 percent) returned the second tracker card. Respondents offered various explanations for not seeking the rewards, including did not recall getting the cards, got them but lost them, forgot to send them in or were too busy with other things.

Raffle entries to win $100 were given to women who attended additional prenatal appointments and prenatal education classes. It was not possible to separate prenatal from postpartum raffle tickets. It is likely that additional women attended classes and prenatal appointments, but did not return a raffle entry. Only 77 women submitted raffle entries for attending additional prenatal appointments with another 30 entries submitted for participating in an educaton class. A total of women 334 women submitted raffle tickets for signing the Healthy Living Pledge.

Summary and Conclusions

The Dean Strong Beginnings project achieved its goal of increasing the HEDIS rates for first trimester prenatal visits. Rates were 9-10 percent greater than the goal of 81.2 percent following the implementation of the intensified outreach plus incentive program. It is not possible to tell whether the incentives were responsible for this effect. The number of women who received an incentive for seeking first trimester prenatal care, 220 through March 31, 2010, was sufficient to raise the HEDIS rate by 10 percent in the two calendar years of the project.

The Strong Beginnings project did not meet the goal set for the HEDIS postpartum rates. The rate in 2008 was 76.9 percent, higher than in 2007, but lower than the goal of 80 percent. Furthermore, the 2009 rate actually fell to 69.8 percent, a rate below 2007.

Intensive outreach efforts following identification of eligible pregnant women was effective in encouraging individuals to engage in regular prenatal and postpartum care with about 58 percent of those identified contacted either by phone or mail. Failure to meet the 80 percent goal was likely due to inaccurate telephone numbers and addresses and individuals who were no longer in the HMO.

Managed Health Services Insurance Corporation

Project Name:	*An Intervention Strategy to Encourage Healthier Lifestyles and Improve Health Outcomes Among BadgerCare Plus Members*
Target Population:	BadgerCare Plus parents and their children ages 2 to 12 in Kenosha County

Description

Managed Health Services (MHS) implemented the "Healthy Lifestyle Incentive Program" in April 2008 to increase well-child exams, identify obese children and make referrals to appropriate interventions. The target population was BadgerCare Plus parents and their children ages 2 to 12 living in Kenosha County, a primarily Hispanic population. MHS staff served as project managers and provided extensive outreach to members and community organizations. These staff also assisted providers during special HealthCheck[44] clinics by taking height and weight measurements, providing member education and making referrals to obesity prevention programs.

The Healthy Lifestyles project focused on increasing HealthCheck exams among the targeted population and, on the basis of those exams, on identifying children who were obese or at-risk for obesity for further education and intervention. Those identified received information about the impact of obesity on their health and were referred to either the Kenosha Boys and Girls Club for exercise activities or the local WIC clinic for nutritional counseling. Staff at these community-based organizations agreed to monitor the weight and height of participating children on a monthly basis and report this information to MHS.

The incentive project was a partnership with the Kenosha Community Health Center (KCHC), a key provider of health services for Kenosha's Hispanic population and a special focus of the grant. KCHC providers received detailed information about the project and were asked to discuss the project with their patients, document BMIs and provide referrals for at-risk children. MHS provided special support to the KCHC throughout the project, including on-site, bi-lingual staff to help recruit Hispanic families as well as organizing and participating in special invitational HealthCheck events to make it easier for targeted children to obtain their exams.

Families with children in the target age range were recruited from MHS's Kenosha BadgerCare Plus membership. Recruitment efforts included direct mailings and telephone calls to parents of eligible children, informing them of the benefits of HealthCheck exams and encouraging them to schedule appointments. The mailing included a packet of education materials, information about the incentives and a healthy recipe cook book in English and Spanish.

Community outreach was an essential component of the project to help identify targeted families, to increase public awareness of childhood obesity; and to encourage participation in the exams and obesity interventions. Among these efforts were: co-sponsorship and participation in Kenosha's Back-To-School Family Celebration; co-sponsorship and participation in the Kenosha Head Start Clinic; and meetings with numerous other organizations, e.g., ELCA Urban Outreach Center,[45] public schools, communities of faith, the local health department and Even Start, a family literacy program.

[44] HealthCheck is Wisconsin Medicaid's Early Periodic Screening, Diagnosis and Treatment (EPSDT) Program providing well-child exams to low-income children under age 18.

[45] The Evangelical Lutheran Congregation of America (ELCA) Urban Outreach Center is a collaboration of eight churches providing services to low-income populations living in Kenosha's urban communities.

The original incentives included:

- A $20 gift card for parents for making and keeping a HealthCheck appointment for their child.
- A $10 gift card for children who had a HealthCheck exam and agreed to keep a one month food diary and to adhere to the "5-a-day" diet regimen.
- An additional $20 gift card if the child participated in nutrition and obesity education programs and activities.
- A $25 gift card for parents of children ages 0-5 who attended three nutritional counseling sessions with a WIC dietician.
- A six-month membership to the Kenosha Boys and Girls Club for exercise and nutrition programs.
- A $15 gift card every three months for children ages six and older who attended the Boys & Girls Club nutrition and exercise program four times per week.

Based on rapid cycle evaluation, the following changes were made over the two years of the project to increase effectiveness:

- July 2008 - age range expanded to include children from birth to age 20 since HealthCheck exams during the first quarter revealed many older obese children.
- October 2008 - project expanded to include other primary care providers in Kenosha County with MHS again organizing special HealthCheck clinics and providing on-site staffing for these events.
- January 2009 - incentive structure changed to include bi-monthly drawings for two $250 gift cards for families completing a HealthCheck exam.
- January 2009 - providers paid $5 for every BMI submitted to MHS with the HealthCheck claim.
- January 2009 – MHS staff person added to project to assist with administrative tasks, e.g., reminder calls to parents; calls and homes visits to 'no-shows;' and calls to parents who failed to attend the Boys and Girls Club and keep WIC appointments for nutrition counseling.

The most significant change was made in September 2009 to address complaints from Hispanic families about the Boys and Girls Club and cultural issues that arose from only providing services to children identified as obese, thus creating friction within families with other children. A new partnership was formed with the Potter's Center, an all-volunteer organization working with Kenosha's Hispanic population. One of the Center's programs, designed by University of Wisconsin-Milwaukee Extension, was a series of four discussion sessions focused on nutrition, healthy eating, physical activity, preparing healthy meals and weight control. The entire family of identified obese children was invited. The discussions were preceded by a healthy meal and followed by a family sports activity. Project incentives for families participating in the Potter's Center healthy living program included the free meal, sports equipment for the children and a family day pass to Action Territory Fun Park or a free one-week pass to Anytime Fitness.

Evaluation Goals, Measures and Data Sources

The primary goal of the MHS Healthy Lifestyles project was to increase the rate of HealthCheck exams among children and youth ages 2-21, with a secondary focus of identifying and treating those who were obese or at risk of obesity among Kenosha BadgerCare Plus members. More specifically, MHS aimed to increase compliance with HealthCheck exams by 10 percent during each project year, starting from a 65 percent baseline in 2007. The HealthCheck targets were,

therefore, a 75 percent exam rate in 2008 and an 85 percent rate in 2009. A secondary goal was to identify obese children, make referrals to appropriate intervention programs and provide participating families with information about how to reduce obesity.

It was estimated that about 1,400 children were in the Kenosha BadgerCare Plus membership; MHS planned to achieve a HealthCheck participation rate of 50 percent per year among these children, about 700 children per year or 175 per quarter. MHS also estimated that 30 percent of the children would have a BMI in the 85th percentile or above, or an estimated 210 children per year (700 x .3 = 210). The target was to recruit half of these children (105 children) per year to participate in the Healthy Lifestyles Project. Over both years, 210 children who were obese or at risk of becoming obese were expected to participate in the weight and nutritional education programs.

Project Activities and Results

The data in Table 13 show that recruitment was a very labor intensive process. For example, of the 1,845 families contacted in all, it required 2,807 phone calls and mailings to 1,545 families to induce 527 of the families (just 29 percent of those contacted) to agree to schedule their child for a HealthCheck exam. Thus, the project failed to meet their recruitment goals in spite of extensive outreach to families, network providers and community organizations.

Table 13: MHS Activities and Results

Activity/Component	Project Total
Members contacted	1845
Phone calls made	2807
Mailings	1545
HealthCheck	
Agreed to attend	527
Attended	354
BMI collected (% of attendees)	277 (78%)
BMI at/above 85th percentile	151 (55%)
Boys & Girls Club	
Eligible	119
Agreed to attend	37
Attended	21 (57%)
WIC Counseling	
Eligible	23
Agreed to attend	14
Attended	5 (36%)
Potter's Center	
Eligible	58
Agreed to attend	29 (50%)
Attended	11 (38%)

The data in Table 13 also reflects the difficulty in collecting BMI scores for children who completed their HealthCheck exams. With initiation of the $5 provider incentive, submission of scores significantly increased. This data indicates that more than half of all children who received a HealthCheck exam were obese (BMI in the 85th percentile or above), far above the projected 30 percent. Still, both pre and post-program BMI data were available only for a limited number of children, making it difficult to determine the extent to which the project affected children's weight or BMI scores. Among 33 children for whom pre/post data on weight and BMI were available, there was no change in weight or BMI during the project's first year. Data were not recorded for most participants during the project's second year.

Table 14 indicates that a total of $25,410 was earned by BadgerCare Plus children and their families in Kenosha County who completed project requirements. In spite of these amounts, there appears to be little evidence that the incentives were helpful in getting families to take their child for a HealthCheck exam or participate in nutritional or exercise programs. Even those who agreed to do one of these things often failed to follow through, despite the availability of the incentives. Overall, about two-thirds of those who agreed to take their child to a HealthCheck exam actually completed the exam. The completion rates for participation in WIC counseling or the Boys and Girls Club program were even lower, and were highly variable from quarter to quarter.

Table 14: MHS Incentives Paid for Participation

Activity	# Members	Cost	Total
Boys & Girls Club membership	21	$175/6 months	$ 4025
Continuing memberships	13	$175/6 months	2275
Boys & Girls Club attendance	5	$25/3 months	175
Completed WIC counseling	2	$25	50
Completed HealthCheck	401*	$25	10375
Bi-Monthly Drawings	26	$250	8000
Potter's Center & HealthCheck	51	$10	510
TOTAL			$25410

*This # is slightly higher than the # shown as completed in Table 15 due to different time frames for data collection.

The Healthy Lifestyles project achieved increases in the rate of HealthCheck exams for the target population. Table 15 shows the average rate of HealthCheck exams among the MHS Kenosha membership before and after the start of the project. The rate for 2008 was 12.7 percent higher than the rate in 2007, and the 2009 rate was 9.9 percent higher than in 2008. The $250 incentive drawings seemed to increase participation in HealthCheck.

Table 15: Average Rate of HealthCheck Exams among Kenosha MHS Members

	2005	2006	2007	2008	2009	2010
Rate of HealthChecks per 1000 eligible children 0-20 years*	47	45	63	71	78	69**

* Based on the actual number of children receiving HealthCheck exams per year and the estimated number of children per CY based on the average of the twelve monthly totals in the age groups.
** Preliminary number based on only five months of data.

As a condition of approval of the partnership with the Potter's Center, MHS agreed to conduct pre and post-surveys of families who attended. Two four-week "healthy living" sessions were held with 11 individuals completing the series — five during the first session and six during the second session. Pre and post-program surveys were collected from all participants. The surveys reflect an increased knowledge about nutrition and the importance of physical activity. All participants also expressed satisfaction with the information provided and stated that the offer of free food and sports equipment influenced their decision to attend. About half of the children who attended all four sessions at the Potter's Center reported decreases in weight and BMI.

Summary and Conclusions

This project made a number of modifications over time in an attempt to increase participation both in HealthCheck exams and in engaging obese children and their families in health-related education and exercise activities. These changes make it difficult to draw firm conclusions about project outcomes.

MHS was fairly successful in contacting members of the targeted population and scheduling appointments, but getting them to complete the HealthCheck exams and/or participate in additional programs was very labor intensive. There were numerous 'no shows' for scheduled HealthCheck appointments despite reminder calls and the availability of incentives.

The project encountered difficulties in collecting children's BMI, both initially from providers and in obtaining follow up BMI scores from the Boys and Girls Club and WIC. The $5 incentive to providers increased reporting of the BMI scores.

Finally, the effectiveness of the incentives in contributing to targeted behavior change is mixed. There was improvement in HealthCheck exams in Kenosha, but not a big change in weight or BMI scores (based on very limited data). It appears the larger dollar amount involving the random drawing for $250 was more motivating than the individual incentives and seemed to correlate with a spike in HealthCheck claims in November and December 2009 and again in February 2010. Self-reported data from individuals attending the Potter Center sessions indicate increased knowledge about obesity and some weight loss.

MercyCare Health Plans

Project Name:	*Adolescent Obesity Intervention Project*
Target Population:	Youth ages 11-17 with a BMI at or above the 85th percentile in Janesville, Beloit and the greater Rock County area

Description

The MercyCare Health Plans (MercyCare) Adolescent Obesity Intervention project targeted BadgerCare Plus youth ages 11-17 with a BMI at or above the 85th percentile in Janesville, Beloit and the greater Rock County area. The project was managed by the MercyCare Quality and Health Initiatives staff with operational responsibility resting with Mercy Health System's Healthy Image Program (HIP), a weight reduction and nutrition program. The project manager provided oversight, verified eligibility and distributed post-program incentives. MercyCare was responsible for identifying potential participants. The HIP coordinator was responsible for conducting all treatment sessions, distributing gas cards to qualifying parents and collecting BMI data.

Primary care providers (PCPs) were asked to refer qualifying youth and their parents to HIP, which made the final determination about whether the child should be enrolled. In addition, information about the program and the incentives was sent to families with children having diagnosis codes indicative of obesity. These targeted families were identified via claims/encounter data supplemented by electronic medical records with children's BMI scores.

The project began recruiting families in April 2008 with initial enrollment in HIP beginning in July 2008. Participating families were treated with a threefold multidisciplinary approach including nutrition, exercise and family counseling. The treatment regimen targeted eating behaviors and physical activity habits, with a secondary focus on improving the family's interpersonal relationships and familial environment.

Successful graduation from HIP (and the project) entailed completing eight to ten sessions with a registered dietician, attending four to six sessions with an exercise physiologist and attending two individual and two family counseling sessions with a family counselor. Treatment was

expected to last 12 to16 weeks. The child's height and weight were measured at the start of HIP and at completion to facilitate calculation of before and after BMI scores.

Participating families were eligible to receive gas cards worth $7 to $10 for each session attended, depending on the distance the families had to travel. Participating children were given a day pass to the YMCA or other local health clubs for each HIP session they attended.

Two incentives were given following completion of the nutrition, exercise and counseling sessions. Youth received their choice of an iPod Shuffle and music card or an electronic dance pad.

Evaluation Goals, Measures and Data Sources
The primary goals of this project were to reduce the BMI scores of graduating participants and to test the efficacy of incentives for encouraging healthy lifestyles by increasing access to the HIP weight and nutrition program and its associated counseling services. The specific goals of the project were to have:

- 30 members with a BMI in the 85th percentile or above referred to the incentive program by their PCP over the two years of project.[46]
- 50 percent of the referred members and their families complete the program.
- Two-thirds of those who complete the program decrease their BMI as measured after 12 to 16 weeks of treatment or up to 20 weeks under extenuating circumstances.

MercyCare staff tracked the number of potential participants identified and contacted via letters and an informational brochure. HIP staff tracked the number of referrals made and accepted, the number and percent of families and youth who completed the attendance requirements and the aggregate and average BMI and weight loss for youth completing HIP.

Project Activity and Results
The capacity of HIP to serve all those who expressed an interest soon presented a major barrier with a number of youth being placed on a waiting list. This contributed to the low number of enrolled youth and those completing the program (the delay in getting into HIP meant that some teens lost their initial interest).

Nevertheless, the Adolescent Obesity Intervention project/HIP met its recruitment goals. As indicated in Table 16, 591 families with obese children were identified and contacted via mail; only 11 were referred by physicians. Of the 116 families who called to get additional information; 31 youth and their families agreed to participate. Fifteen of these youth/families dropped out before completing all of the required sessions. After 27 months, 16 youth had completed HIP.

[46] Children in the BMI percentile range 85 to 94 are considered overweight compared to their peers, while children in the 95th percentile or above are considered obese.

Table 16 – MercyCare Activities and Results

Project Activity	Totals
Youth/families contacted	591
Youth/families expressing interest	116
Youth/families enrolled	31
Youth/families completing program	16

The majority of project participants who completed HIP was female (59 percent); participants ranged in age from 12 to 19 years old with most being between 14 and 17. Of the 13 youth[47] who completed the program, six lost a total of 42 pounds with the remaining seven gaining a total of 61 pounds. The largest weight loss was 18 pounds and the smallest was 1 pound. The average BMI reduction for the 13 children was .05 points. While these results were disappointing, project staff believes, and reports from the survey and focus groups confirm, that participants met many of their short-term goals — eating more vegetables and fresh fruit, reducing intake of high calorie drinks, getting more exercise — and learned skills that would be helpful in their day-to-day life.

As of July 2010, 13 iPod Shuffles with music cards were awarded to the youth who completed HIP. In addition, participants received 233 YMCA or health club fitness day passes and 214 gas cards averaging $6.95 each.

Satisfaction surveys were mailed in September 2010 to both the 30 youth who enrolled in HIP and their parents/guardians. Those completing and returning the survey received a $15 Wal-Mart gift card. Thirteen surveys were returned by each group (26 total). Two focus groups — one for youth and one for parents/guardians — were held to gather additional information about HIP and the impact of the incentives. Invitations to attend were extended to all teens who initiatied participation and their families. Five teens and five parents/guardians attended the one-hour focus groups; each participant received a $50 gift certificate. Of the five teens who participated, two had completed HIP, two had dropped out and one was still active in the program.

Both teens and adults expressed high satisfaction with HIP (8.1 out of 10) and both groups would highly recommend the program to others. A third common finding from the survey and focus groups was the expressed need for group activities among participating teens to increase their commitment to get healthier and to support each other in achieving their goals.

The survey and focus groups also highlighted the importance of the incentives for the targeted population. Parents/guardians and teens reported that the iPod was a good motivator and the gas cards were very helpful in getting to and from the appointments. Teens also valued the information they received about diet and exercise, stating that “they knew they were couch potatoes, but did not know what to do about it.” Another important comment from the focus groups was the need to acknowledge the impact of peer support (or lack thereof) on teens ability to lose weight.

Summary and Conclusions

The Adolescent Obesity Intervention Project/HIP met its enrollment goal. The carefully designed incentives for teens served as a motivator for initial enrollment in the project, even for those who

[47] Data on the last three participants was not available for this analysis.

did not complete the program. Both parents and teens expressed a high level of satisfaction with the program and stated they would recommend it to others. A missing component seemed to be teen group activities for peer support and encouragement.

Only six of the thirteen teens who completed HIP lost weight. MercyCare and HIP staff also documented that even those who gained weight met other goals such as reducing the number of high calorie drinks they consume, eating more fruits and vegetables, and getting more exercise, including playing sports and going to the Y and swimming pool with friends.

There was a lack of referrals from PCPs with only 11 of the 116 inquiries based on physician referrals. The use of diagnosis codes from claims/encounter data to identify possible participants was not as effective as initially envisioned. The added use of electronic medical records that had BMI scores helped MercyCare meet their recruitment goal.

Security Health Plan of Wisconsin, Inc.
Project Name: *Two-Year-Old Blood Lead Screening Incentive Program*
Target Population: BadgerCare Plus toddlers about to turn two-years-old

Description
The Security Health Plan of Wisconsin (Security) Blood Lead Screening Incentive Program was designed to increase the percentage of BadgerCare Plus two-year-olds who receive a blood lead screening test. Federal Medicaid regulations require that all children between 12 and 24 months of age be screened.

The Lead Screening project targeted the parents and guardians of BadgerCare Plus children who turned two years of age between April 1, 2008 and March 31, 2010. Eligible children were identified from birth and HMO records. Parents were mailed an information packet about the project about two months before their child's second birthday. The packet included information about the importance of lead screening and the $25 incentive and an addressed, postage-paid card to be returned after screening to claim the gift card.

Security estimated that about 2,040 children would turn two during the twenty-four month project period. A total of 2,737 families were mailed packets by March 31, 2010. The project began on April 1, 2008. Due to a relatively slow start-up and the low number of incentives issued, the project was extended through September 2010 with incentives paid through December 2010.

Evaluation Goals, Measures and Data Sources
The primary goal of the Lead Screening project was to increase the percentage of BadgerCare Plus two-year-olds who received a blood lead toxicity screening from about 58 percent (2005-2007 average) to 90 percent by the end of the two-year project. A secondary goal was to increase parents' knowledge about the importance of lead screenings. Table 17 shows the lead screening rates for two-year-old members for 2005 – 2009.

A "HEDIS-like" measure[48] provided baseline and 2009 outcome results for the Security project. Many families utilized WIC services for the lead screenings which did not generate a Security

[48] DHS replaced the national HEDIS measure for lead screening a few years ago with this measure to accomodate separate lead screening rate calculations for one and two year olds, as required by CMS. The new measure combines CDC STELLAR (Centers for Disease Control and Prevention Systematic

claim. Screenings done by WIC were, however, recognized by STELLAR and then linked with Security enrollment records, thereby giving a more complete data set on which to based lead screening rates.

Program activities, including the number of mailings, telephone calls and incentives issued were submitted in quarterly reports from the the project and are summarized in the following section.

Project Activities and Results
Project staff anticipated that parents would have the lead screening test done by a Security health care provider or at the local health department. Parents were asked to return the postage paid postcard to Security after their child had been screened. Staff then looked for a lead screening claim for confirmation that the test had been done. The $25 Wal-Mart gift card was then mailed to the family.

After a few months, issues were noticed in the enrollment data file being used to identify prospective participants. First, new families joined the HMO after their children were born which meant Security did not have a birth record for those children. This was resolved by manually sorting through enrollment data. A second issue involved families who were sent a packet even though they had their child screened before they joined Security. Parents in this group who returned a card were sent the gift card, but the screening was not counted in calculating Security's rate.

By December 2008, with nine months experience, Security staff became concerned with the project's relatively low number of confirmed screenings compared to the number of packets sent to parents. Telephone calls to parents who had not responded revealed that many parents had simply thrown away the information. As a result, the information packet was redesigned to make it easier to notice the reward for screening at first glance, and, subsequently increase the number of parents who read it. Interested parents were sent a second packet.

The calls also revealed that a number of Security members had their toddlers screened for lead at the WIC clinic. WIC frequently did not bill the HMO for the screening.

The primary interventions of the Security Two-Year-Old Lead Screening project were outreach in the form of educational packets sent two months before the child's second birthday and the offer of a $25 gift card for having a screening completed. The outreach was strengthened in 2009 by selective telephone calls and mailing the redesigned incentive offer.

Table 17: Percentage of Two Year Olds Screened for Lead Toxicity*

Year	2005	2006	2007	2008	2009
Percentage Screened	56.1%	58.3%	59.7%	60.2%	68.1% *Goal was 90%*

* DHS Annual BadgerCare Plus Pay-for-Performance reports, including preliminary results for 2009.

The results in Table 17 show an increase in the lead screening rate for two-year olds to 68.1 percent in 2009. Although the project did not reach its 90 percent goal, the eight percent increase represents an appreciable jump that is associated with the project. However, given the nature of the project's design (no control conditions), it is not possible to determine whether this

Tracking of Elevated Lead Levels and Remediation) data with DHS claims/encounter data to determine lead screening rates for the HMOs.

increase resulted from the project activities or is due to other factors or to chance. Moreover, since both the outreach and the incentive were implemented together, even if the project's efforts caused the increase in screening, it is not possible to estimate whether the increase was due to the additional outreach, to the availability of an incentive or to a combination of both.

Table 18 summarizes Security's Lead Screening project activities from April 1, 2008 through November 30, 2010. Information packets were mailed to an average of 378 members per quarter for the seven-month summary period (July 2008 – March 2010) and an average of 87.7 incentives was awarded during this period. Beginning in 2009, Security staff called parents without a lead screening claim. Those reporting that they had not received or had thrown out the original information packet were sent new packets. Through March 31, 2010, a total of 893 calls were made and 187 packets were resent. Over the course of the project, 3,429 informational packets were mailed resulting in blood lead screenings for 813 toddlers. The cumulative percentage of incentives to mailings was 23.2 percent.

Table 18: Mailings, Members Called, Resends and Incentives

Project Quarter	Time Period	Member Mailings	Attempted Calls to Members	Resends	Incentives issued
1	4/01/08 – 6/30/08	94	---	---	0
2	7/01/08 – 9/30/08	310	---	---	43
3	10/01/08 – 12/31/08	251	---	---	66
4	1/01/09 – 3/31/09	352	177	51	60
5	4/01/09 – 6/30/09	470	284	62	108
6	7/01/09 – 9/30/09	426	172	21	124
7	10/01/09 – 12/31/09	430	122	22	99
8	1/01/10 – 3/31/10	404	138	31	114
9	4/01/10 – 6/30/10	286	---	---	90
10	7/01/10 – 9/30/10	406	---	---	91
11	Through 11/30/10	0	---	---	18
Total through 11/30/10		3429	893	187	813

Summary and Conclusions
Security's Two-Year-Old Blood Lead Screening Incentive project was associated with an eight percent increase in the HEDIS-like measure in 2009, to 68.1 percent, compared to less than 60 percent in 2005-2007. The project did not meet its goal of 90 percent, despite the increase. Given the nature of the project's design (no control conditions), it is not possible to infer that the outreach and incentives caused the increased rate.

Security staff note that some parents admitted during the follow up calls that they did not know or understand the importance of lead screening for their children's physical development and well-being. Additional educational mailings and telephone calls could continue the positive results associated with this project.

UnitedHealthcare of Wisconsin/AmeriChoice
Project Name: *Diaper Rewards: Well-Child Visit Incentive Program*
Target Population: BadgerCare Plus parents or guardians of new-born infants in Milwaukee

Description
Diaper Rewards, launched by UnitedHealthcare of Wisconsin/AmeriChoice (United) in April 2008, was designed to improve the rate of well-child (HealthCheck) exams during the baby's first year of life by providing proactive outreach and product-based incentives to the child's parent or guardian. The incentives included up to six jumbo packs of Pampers and a $20 Wal-Mart gift card. The target population for Diaper Rewards was BadgerCare Plus members who were the parents or guardians of new-born infants. Based on 2006 usage data, about 600 deliveries per month were anticipated or about 7,200 for each of the two project years. The project was led by the Manager of Outreach and Advocacy and administered by United staff.

It was relatively simple to identify and locate the targeted population. Prospective births were identified by United Healthy First Steps Case Managers and by concurrent inpatient reports of delivery in United's utilization management data system. The Healthy First Steps program was designed to identify pregnant BadgerCare Plus members as early as possible and assign case managers to work with them throughout their pregnancies to help ensure a healthy birth.

Within three days of identification, United staff sent all live birth mothers a Diaper Rewards packet with materials either in English or Spanish, depending on the infant's ethnicity. The packet included an introductory letter explaining the program and five postage-paid post cards for the mother to take with her to specific HealthCheck exams, i.e., mother's 6-week postpartum checkup and baby's 1, 2, 4 and 6-month exams. The two-step process included registration with a Customer Care representative who initiated the first reward of a jumbo pack of Pampers and taking the post cards with them to each visit for the physician's signature. For each postcard signed and returned, mothers received a gift certificate for a jumbo pack of Pampers. If all exams were completed, mothers also received a $20 Wal-Mart gift card.

Evaluation Goals, Measures and Data Sources
The goal of Diaper Rewards was to improve the rate of HealthCheck exams during the first 12-15 months of the baby's life. Attainment of this goal was measured by change in the annual HEDIS Well-Child Visit rate. The short-term objectives were:

- In year one, to increase the HEDIS Well-Child Visit rate (six visits by 15 months) from the 2006 baseline of 40.41 percent (10^{th} percentile nationally) to 46.62 percent (25^{th} percentile nationally).
- In year two, to increase the HEDIS Well-Child Visit rate to 56.6 percent (50^{th} percentile nationally).

The long-term objectives were:

- To identify efficient and effective incentives to promote healthy behaviors in the adult Medicaid population.
- To achieve yearly HealthCheck rates which exceed the federal requirement of 80 percent for all United member children.

The evaluation also tracked process goals, including the number of contacts attempted and the incentives awarded for completing the required activities. The project tried to contact all new

mothers. It was predicted that 10 percent of all contacts would result in a gift card reward, signifying that the post-partum visit and the four HealthCheck visits had been scheduled and kept.

Project Activities and Results

The goal of Diaper Rewards was to increase the HEDIS Well-Child Visit rate from the baseline of 40.4 percent (the 2006 administrative rate) to 46.62 percent for 2008 and 56.6 percent for 2009.[49] Hybrid methodology goals were added in 2008. The HEDIS 2007 NCQA Quality Compass Benchmarks were retained through the project conclusion for consistency.

Table 19: United HEDIS Well-Child (HealthCheck) Visit Rates Pre and Post

	2006	2007	2008	2009
HEDIS Well-Child Visit Administrative Rate	40.4%	42.1%	47.0%	47.5%
Target Well-Child Visit Administrative Rate	----	----	46.62% *25th percentile nationally*	56.6% *50th percentile nationally*
HEDIS Well-Child Visit Hybrid Rate[50]	Not measured	57.9%	65.3%	66%
Target Well-Child Visit Hybrid Rate	Not in place	Not in place	64.4% *75th percentile*	67.96% *10% gap closure from 75th*

The results presented in Table 19 show that the rates were 40.4 percent in 2006, 42.1 percent in 2007, 47 percent in 2008 and 47.5 percent in 2009. Thus, Diaper Rewards is associated with an increase of 6.6 percent in the administrative rate for well-child visits in 2008 compared to 2006, and an increase of nearly 5 percent compared to 2007. United met and exceeded its project goal of 46.6 percent during the first year of operation for the Diapers Reward program and was above the 25th percentile nationally.

The data also show that the rate did not increase to the target level of 56.6 percent in 2009, although the 2009 rate of 47.5 percent is slightly higher than 2008. Thus, only one of the two short-term outcomes was met.

Although the administrative rate of well-child visits among United members increased in 2008 and 2009 following the launch of the project compared to the 2006 baseline, the project's design makes it difficult to infer that this increase was caused by the interventions (i.e., the outreach and incentives). As with all of the projects, the increase in well-child visits may have resulted from other factors, or by chance.

The United application identified a long-term goal of achieving yearly HealthCheck rates which exceed the federal requirement of 80 percent for all member children. Table 20 shows the HealthCheck rates before and after Diaper Rewards was implemented.

[49] The 2007 estimate was not available at the time of the grant application.

[50] The HEDIS hybrid method supplements administrative data with a randomly selected sample of members' medical charts and paper records which documents services that do not generate claims/encounter data, e.g., from local health departments or WIC clinics. This method generally results in higher service rates.

Table 20: United HealthCheck Rates Pre and Post*

	2006	2007	2008**	2009**
HealthCheck Rates	95.1%	86.5%	87.5%	85.3%

*Based on date of service.
** 2008 and 2009 are internal rates.

HealthCheck rates for United members were about the same in 2008 as in 2007, and fell to 85.3 percent in 2009. The results in Table 20 also show that the federal standard of 80 percent was achieved before the program began, at least by 2006, and was maintained through 2009.

Table 21 shows the yearly project totals for incentives (diaper packs and the gift card) awarded for responding to the initial "congratulations" message by registering for the program, keeping a six-week postpartum visit and keeping the four HealthCheck visits at 1, 2, 4 and 6 months.

Table 21: United Incentives Awarded

	Year One Totals	Year Two Totals	Grand Totals
Congratulations/registration	2046	1962	4008
Postpartum Visit	1491	1674	3165
1 Month WC Visit	1973	2112	4085
2 Month WC Visit	1676	2090	3766
4 Month WC Visit	1066	1827	2893
6 Month WC Visit	620	1482	2102
Gift Card (all visits kept)	474	1121	1595

Results were much better for later term activities, particularly the 4 and 6-month visits and the gift card in year two compared to year one. This was due to the time-lag between the first "congratulations" contact and the opportunity for the last visit 6-months later; many mothers congratulated late in year one made their later visits and completed requirements for a gift card in year two.

The project exceeded its goal of having 10 percent of all mothers contacted completing the program by keeping all visits and earning a gift card. About 6,693 new mothers were contacted in year one and 4,023 in the first two quarters of year two, for a total of 10,716 new mothers contacted during the first six quarters of the program. Women contacted during the final two quarters would not have had time to complete all visits and were therefore not included in the calculation. A total of 1,595 gift cards were awarded in both years. The completion rate among mothers contacted was about 14.9 percent, well above the target of 10 percent.

Summary and Conclusions
The results show that the United Diaper Reward Program exceeded its project goal during the first year of operation by achieving a well-child visit rate of 47 percent compared to 40.4 percent in 2006 and 42.1 percent in 2007. Performance was above the 25th percentile nationally. It is not possible to determine whether the outreach and incentives offered through this project caused the increased rate or whether this resulted from other factors.

The results also indicate that the rate did not increase to the expected level of 56.6 percent in 2009, nor did it increase to the 50th percentile nationally. Thus, only one of the two primary outcome goals was met.

About 14.9 percent of new mothers completed the visits and earned the incentive, exceeding the project's goal that 10 percent of all mothers contacted would complete the program by completing all required visits.

DISCUSSION

Numerous studies suggest that the use of incentives is a viable strategy for motivating individuals to adopt healthier behaviors with the majority of evidence based on workplace wellness programs. Very few studies, however, have looked exclusively at the use of incentives within low-income populations, including individuals enrolled in Medicaid. Wisconsin's Individual Incentive Initiative supported six health maintenance organizations (HMOs) in testing whether incentives offered to BadgerCare Plus (Medicaid) members would have a positive effect on a range of health behaviors. The targeted behaviors included simple tasks such as getting a blood lead test for a toddler and more complex tasks such as adolescents losing weight. Unlike employer-based wellness programs, all projects operated within the context of healthcare settings.

The Initiative had very ambitious goals and study questions, and each HMO articulated measurable health outcomes. The Initiative, as a whole, was unable to address the stated questions primarily due to initial design flaws and a host of implementation issues. It is not possible to assess the impact of the six projects on long-term health outcomes due to the short time-frames for the intervention, consistent with the majority of employer wellness studies.[51]

While the outcome goals were not achieved, the individual projects confirmed the key components of effective reward programs and offer insight into how similar efforts might be structured in the future. They also provide guidance on potential solutions to implementation challenges.

Identification and Recruitment

As reflected in the literature, a key component of successful programs to encourage healthier behaviors is identifying at-risk individuals, e.g., those with chronic medical conditions or those who can reduce their risk via lifestyle changes.[52] Each project targeted a specific BadgerCare Plus population, e.g., pregnant women, parents with toddlers and children / adolescents, with carefully designed marketing materials and repeated personal telephone calls.

Each project used multi-pronged approaches, including claims and encounter data and outreach to health care providers, to identify targeted members. Once identified, all of the projects experienced some difficulty in being able to contact the identified members, e.g., mailed materials were returned as moved or undeliverable or telephones were disconnected. States or other entities interested in implementing behavior modification strategies for low-income populations should be mindful of their mobility.[53]

---

[51] Kenneth R. Pelletier, PhD, MD. "A Review and Analysis of the Clinical- and Cost-effectiveness Studies of Comprehensive Health Promotion and Disease Management Programs at the Worksite: 1998-2000 Update." *American Journal of Health Promotion, Inc.* November/December 2001, Vol. 16, No.2.

[52] Kevin G. Volpp, Mark V. Pauly, George Loewenstein and David Bangsberg. "P4P4P: An Agenda For Research on Pay-For-Performance For Patients." *Health Affairs.* Vol. 28, no. 1, 206-214.

[53] Jessica Greene. "Medicaid Efforts to Incentivize Healthy Behaviors." Resource Paper. Center for Health Care Strategies, Inc. July 2007.

Data from the projects indicate that it was difficult to engage physicians and other health care professionals in identifying potential members for participation and in making referrals. This finding was not surprising given time-pressures in busy primary care clinics as well as other high priority efforts clinic staff are asked to support.

Once identified, the HMOs did well in soliciting interest in the incentive project. The bigger challenges appeared in getting individuals engaged in program activities. For example, of the 591 parents with an obese adolescent identified by MercyCare and expressing interest in their new weight loss program, only 31 became active participants. Reasons for the lack of involvement ranged from issues with transportation, the youth refused to attend and scheduling issues. Both projects targeting pregnant women/new mothers had better results with participation rates of 14 to 50 percent (of those identified as being in the target population).

The most successful strategy for engaging members appears to have been building on existing relationships with case managers (for pregnant women) closely followed by mailing colorful brochures / postcards and personal phone calls.

Incentives

Incentives for each of the projects varied. All six included some form of gift card; two included drawings for cash prizes; and the three focused on childhood obesity also offered sports equipment and memberships to the YMCA / YWCA or other organizations providing gyms or physical activities. While it is not possible to determine a causal link between engagement in healthier behaviors and the incentives, responses from the focus groups and surveys from participants suggest that the rewards were instrumental in encouraging enrollment and promoting the desired activity.[54] For example, all of the parents and youth who participated in Children's LEAP program reported that the rewards played a major role their initial enrollment and continued involvement. Youth in MercyCare's Healthy Image Program reported that the potential to obtain an iPod was a good motivator. Youth in Children's LEAP program made good use of the athletic equipment, e.g., soccer balls or small weights, that they earned.

Almost equal to the incentives was the value that participants placed on obtaining new information.[55] One Hispanic mother of a two-year-old told the Security staff that she did not know about the potential dangers of lead poisoning / exposure to lead and subsequently was unaware of the need for her toddler to have a blood lead test. Parents and children that attended education sessions about the importance of physical activities and how to choose and prepare healthier food (Children's, MercyCare and Managed Health Services) expressed appreciation for the new information and stated that they had made both small and significant changes in their lifestyles.

The projects provide several lessons in how incentives should be structured. First, as suggested in the literature, communication about the incentives must be simple and easy to understand.[56] A common theme from participant surveys and the focus groups was the lack of clarity about what they needed to do to earn the incentive and, more importantly, the number of steps required to get the incentive. For example, parents participating in United's Diaper Rewards

[54] Michael P. O'Donnell. "Editor's Notes." *American Journal of Health Promotion.* 2012; 26(5): iv-vii.
[55] Robert L. Kane, et al. "Economic Incentives for Preventive Care." *Evidence Reports/Technology Assessments.* No. 101. Agency for Healthcare Research and Quality. August 2004.
[56] Greene, 2007.

project were required to register with a Customer Care representative, take a card with them to their baby's well-child visits and have it signed by their provider, then mail the card back to the HMO. Many of the parents did not remember to take the card with them and those that did remember often forgot to get the needed signature and / or forgot to mail them.

Studies on incentives also highlight the importance of providing the incentive as quickly as possible after the desired behavior occurred, e.g., attended an education session, to ensure that members understood the linkage between actions and rewards.[57] One focus group participant stated "it should not take two months to get a gift card." The most successful projects distributed the incentives on site, i.e., at the end of an activity.

Second, the literature review suggests that larger rewards show more robust positive outcomes.[58] This was not necessarily true for the six projects. For example, even with the high value of the incentives under Children's LEAP to be Healthy Initiative (up to $794), their participation rate of 6.53 percent was only slightly higher than MercyCare's NEW Kids project (iPod Shuffle or Dance Pad) at 5.24 percent. The project led by Managed Health Services to increase adolescent well-child exams did see a slight increase in parents keeping appointments following implementation of the $250 quarterly raffle.

It should be noted that the variety of incentives – cash or gift cards, memberships and passes to athletic clubs and athletic equipment – were especially appreciated by participating youth. In these three projects – Children's, MercyCare and Managed Health Services – the incentives and education were equally important to the parents/caregivers.

Implementation and Administration

A third key component of wellness programs that include incentives highlighted in the research is effective administration.[59] The amount of staff time needed to ensure that the projects were successfully implemented was unanticipated.

Staffing for the incentive initiative was provided by the Department of Health Services (DHS) and each HMO. DHS dedicated the equivalent of one full-time staff person with one serving as the project director and one working with the HMOs on the evaluation, including establishing processes for documenting implementation and collecting data. The project director managed the grants and provided technical assistance. A large portion of her time was spent working with the HMOs to quickly address issues identified via the rapid cycle evaluation. This approach worked extremely well but created major challenges for the evaluator, e.g., it was often difficult to keep up with the changes to the individual projects and very hard to assess impact.

Each HMO provided staff (in-kind) to support the project with all but one dedicating a full-time manager. Like DHS, the HMOs did not anticipate the amount of time that would be needed to:

- Launch the project.
- Obtain the incentives, e.g., gift cards, gym memberships, athletic equipment.
- Identify and recruit the targeted population.
- Develop effective communication and recruitment materials and strategies.

[57] Volpp, *Health Affairs*. 2009.
[58] Kevin G. Volpp, et al. "A Randomized, Controlled Trial of Financial Incentives for Smoking Cessation." *The New England Journal of Medicine.* Vol. 360: 699-709. February 12, 2009.
[59] Pelletier, 2001.

- Attempt to engage their provider network.
- Document changes as they occurred.
- Reduce barriers to individual participation, e.g., transportation.
- Collect and analyze data.

CONCLUDING SUMMARY

This study provides several valuable lessons for developing individual incentive programs to encourage BadgerCare Plus (Medicaid) members to engage in healthier behaviors. While the pilot projects did not achieve their stated goals, they did suggest that carefully designed incentives coupled with patient education can motivate individuals to make small, positive changes in their lives.

Implementation challenges encountered by the pilots are consistent with those experienced by the ten states participating in the national Medicaid Incentives for the Prevention of Chronic Diseases.[60] Lessons learned from these five-year demonstration initiatives combined with earlier state experiences will provide solid foundations for future efforts to help low-income populations adopt healthier behaviors.

In summary, results from the six pilot individual incentive projects suggest the following:

- Incentives may be an effective tool in encouraging individuals to adopt modest behavior changes.
- Clear and concise marketing materials, including how to earn and use the rewards, are critical to success. These materials should be readily available where members most often go and have a consistent message.
- Timely reward redemption is critical to success.
- For the low-income population, patient education appears to be valued equally to the incentives.
- Interventions targeting children and youth may be more effective if done in groups or if at least some activities include group work.
- Administrative records are a good tool for identifying the targeted population, although current contact information is frequently out-of-date.
- Utilizing physicians and other professional staff as a source of referrals is challenging given clinic time pressures and other priorities.
- The amount of time required to implement and adapt effective programs should not be underestimated.

The results also confirm the need for additional research to guide development of future financial incentive initiatives. Such studies would help determine: the costs / benefits of various approaches; the optimal size and frequency of the incentives; how to target specific populations; effective marketing and outreach strategies; and both short- and long-term outcomes.[61]

[60] Notes from all-grantee meetings, May and December 2012; the states are: California, Connecticut, Hawaii, Minnesota, Montana, Nevada, New Hampshire, New York, Texas and Wisconsin.
[61] Volpp. *Health Affairs,* 2009.

References

Alker, Joan and Jack Hoadley. "The Enhanced Benefits Rewards program: Is it changing the way Medicaid beneficiaries approach their health?" Florida's Experience with Medicaid Reform. Jessie Ball DuPont Fund. Briefing #6, July 2008.

Barth, John and Jessica Greene. "Encouraging Healthy Behaviors in Medicaid: Early lessons From Florida and Idaho." *Issue Brief.* Center for Health Care Strategies, Inc. July 2007.

Berry, Leonard L., Ann Mirabito and William Baun. "What's the Hard Return on Employee Wellness Programs." Research Paper No. 2012-68. Mays Business School, Texas A&M University. *Harvard Business Review.* December 2010.

Blumenthal, Karen J., Kathryn A. Saulsgiver, Laurie Norton, Andrea B. Toxel, Joseph P. Anarella, Foster C. Gesten, Michael E. Chernew and Kevin G. Volpp. "Medicaid Incentive Programs to Encourage Healthy Behavior Show Mixed Results to Date and Should Be Studied and Improved." *Health Affairs,* 32, no. 3 (2013):497-507.

Centers for Medicare & Medicaid Services. "Patient Protection and Affordable Care Act, Section 4108, Medicaid Incentives for Prevention of Chronic Diseases. U.S. Department of Health and Human Services. Initial Announcement. February 23, 2011.

Cummings, John. "Finding the ROI in Wellness Incentives." *Business Finance.* http://businessfinancemag.com. August 11, 2008.

Employee Benefit Research Institute. *Notes*. December 2010. http://ebri.org/publications/notes accessed June 2011.

Florida Office of Program Policy Analysis and Government Accountability. "Medicaid Reform: Beneficiaries Earn Enhanced Benefits Credits But Spend Only a Small Proportion." Florida Legislature, July 2008.

Georgetown University Health Policy Institute. "As Legislators Wrestle to Define Next Generation of Flordia Medicaid, Benefits of Reform Effort Are Far From Clear." Florida's Experience with Medicaid Reform. Georgetown University, April 2011.

Giuffrida, Antonio, and David J. Torgerson. "Should we pay the patient? Review of financial incentives to enhance patient compliance." *British Medical Journal.* 1997; 315: 703-707.

Greene, Jessica. "Medicaid Efforts to Incentivize Healthy Behaviors." *Resource Paper.* Center for Health Care Strategies, Inc. July 2007.

Greene, Jessica. "Using Consumer Incentives to Increase Well-Child Visits Among Low-Income Children." *Medical Care Research and Review.* May 2, 2011.

Harvard School of Public Health. "Employer Health Incentives." Winter 2009.

Hendryx, Michael, et al. “Evaluation of Mountain Health Choices: Implementation, Challenges, and Recommendations.” The West Virginia University Institute for Health Policy Research and Mathematica Policy Research. August 2009.

Kaiser Commission on Medicaid and the Uninsured. “KYHealth Choices Medicaid Reform: Key Program Changes and Questions.” The Henry Kaiser Family Foundation. July 2006. Additional information about Get Healthy accounts, including take-up rates and usage, was not accessible.

Kaiser Health News. “Medicaid To Offer Rewards for Healthy Behavior.” Aimee Miles. April 11, 2011. http://www.kaiserhealthnews.org/Stories/2011/April/08/Mediciad-incentives. accessed June 10, 2011.

Kaiser State Health Facts: State Medicaid Fact Sheet. http://www.statehealthfacts.org/profileind.jsp?cat=4&sub+47&rgn=51&print=1. accessed June 8, 2011.

Kane, Robert L., Paul E. Johnson, Robert J. Town and Mary Butler. “A structured review of the effect of economic incentives on consumers’ preventive behavior.” *American Journal of Preventive Medicine.* Vol. 27, No. 4: (2006): 327-352.

Kane, Robert L., Paul E. Johnson, Robert J. Town and Mary Butler. *Economic Incentives for Preventive Care.* Evidence Reports/Technology Assessments, No. 101. Rockville: Agency for Healthcare Research and Quality, August 2004.

Kenny, Genevieve M. and Jennifer E. Pelletier. “Medicaid Policy Changes in Idaho under the Deficit Reduction Act of 2005: Implementation Issues and Remaining Challenges.” SHARE Issue Brief. Washington, D.C.: The Urban Institute, September 2010.

Langley, GL, T. Nolan, C. Norman and L. Provost. *The Improvement Guide: A Practical Approach to Enhancing Organization Performance (2nd Edition).* San Francisco, CA: Jossey-Bass Publishers, 2009.

Lewis, Sue and Sue Willette. ‘The Art and Science of Health Incentives.” www.IncentOne.com, 2007. accessed June 8, 2010.

Loyaltyworks. “Nebraska company enjoys five to one ROI on wellness initiative.” June 14, 2011. http://www.loyaltyworks.com/incentiveindustrynews/incentive-programs/nebraska-company-enjoys-five-to-one-roi-on-wellness-initiative/. accessed August 16, 2011.

Marteau, Theresa M., Richard E. Ashcroft and Adam Oliver. “Using financial incentives to achieve healthy behavior.” *British Medical Journal.* 2009; 338: b1415.

Merrill, R.M., B. Hyatt, S.G. Aldana and D. Kinnersley. “Lowering employee health care costs through the Healthy Lifestyle Incentive Program.” *Journal of Public Health Management Practices.* 2011 May-June; 17(3):225-32.

National Association of State Medicaid Directors. “Health Promotion and Prevention Programs.” *Medicaid Trend Snapshots, November 2006.* American Public Human Services Association.

NGA Center for Best Practices. “Creating Healthy States: Promoting Healthy Living the Medicaid Program.” Issue Brief. National Governors Association, August 4, 2006.

O’Donnell, Michael P. “Editor’s Notes: Financial Incentives for Workplace Health Promotion: What Is Equitable, What Is Sustainable, and What Drives Health Behaviors?” *American Journal of Health Promotion 2012; 26(5): iv-vii.*

Office of Program Policy Analysis & Government Accountability. “Medicaid Reform: Beneficiaries Earn Enhanced Benefits Credits But Spend Only a Small Proportion.” Florida Legislature. Report No. 08-45. July 2008.

Oliver, Adam and Lawrence D. Brown. “A Consideration of User Financial Incentives to Address Health Inequalities.” *Journal of Health Politics, Policy and Law.* 2012 Vol.37, No. 2: 201-226.

Oliveris, Adam. “Do Wellness Incentives Work?” *Health Care Cost Monitor.* The Hastings Center. February 18, 2010.

Pelletier, Kenneth R., PhD, MD. “A Review and Analysis of the Clinical- and Cost-effectiveness Studies of Comprehensive Health Promotion and Disease Management Programs at the Worksite: 1998-200 Update.” *American Journal of Health Promotion.* 2001; 16(2): 107-116.

Redmond, Pat, Judith Solomon and Mark Lin. “Can Incentives for Healthy behavior Improve Health and Old Down Medicaid Costs?” Washington, D.C.: Center for Budget and Policy Priorities, June 2007.

Scott, Anthony and Stefanie Schurer. “Financial incentives, personal responsibility and prevention.” Discussion Paper: National health and Hospitals Reform Commission. Melbourne Institute of Applied Economic and Social Research. 2008.

Sullivan, Stephanie. “Wellness Programs.” http://www.e-hresources.com. accessed September 25, 2012.

Sutherland, Kim, Jon Christianson and Shelia Leatherman. “Impact of Targeted Financial Incentives on Personal health Behavior: A Review of the Literature.” *Medical Care Research and Review.* Vol. 65, No. 6 supplement: 36S-78S. December 2008.

Thomson Reuters. “Guidance Document on Preparing a Solicitation for Section 4108 of the Patient Protection and Affordability Act: Incentives for the Prevention of Chronic Diseases in Medicaid: Final Report.” February 3, 2011.

University of Wisconsin-Oshkosh, Center for Career Development. “*BadgerCare Plus Focus Groups Report*.” October 2007.

Volpp, Kevin G. “Paying People to Lose Weight and Stop Smoking.” *LDI Issue Brief.”* Vol. 14, No. 3, February 2009.

Volpp, Kevin G., David A. Asch, Robert Galvin and George Loewenstein. “Redesigning employee health incentives—lessons from behavioral economics.” *The New England Journal of Medicine.* 2011; 365 (5): 388-390.

Volpp, Kevin G., Leslie K. John, Andrea B. Troxel, Laurie Norton, Jennifer Fassbender and George Loewenstein. “Financial Incentive-Based Approaches for Weight Loss.” *The journal of the American medical Association.* Vol. 300, No. 22: 2631-2637. December 10, 2008.

Volpp, Kevin G., Mark V. Pauly, George Loewenstein and David Bangsberg. “P4P4P: An Agenda For Research On Pay-For-Performance For Patients.” *Health Affairs.* Vol. 28, No. 1: (2009): 206-214.

Volpp, Kevin, G., Andrea B. Troxel, Mark V. Pauly, Henry A. Glick, Andrea Puig, David A. Asch, Robert Galvin, Jingsan Zhu, Fei Wan, Jill DeGuzman, Elizabeth Corbett, Janet Weiner, and Janet Audrain-McGovern. “A Randomized, Controlled Trial of Financial Incentives for Smoking Cessation.” *The New England Journal of Medicine.* Vol 360, No. 7: 699-709.

Wilson, Thomas. “Framework for Assessing the Financial Benefit of Wellness Programs.” *Journal of Health & Productivity.* Institute for Health and Productivity Management. December 2009.

Zook, Tony. “The ROI of Wellness.” Forbes.com. http://www.forbes.com/2006/04/21/wellness-programs-gold-standards-cx_tz_0424wellness_print.html. accessed August 16, 2011.