

Incentive-Based Interventions

A systematic review of pay-for-performance programs and interviews with leaders of 15 major performance incentive programs in the United States (conducted by Finding Answers) indicated that the majority of current programs are not designed to reduce disparities and often lack characteristics that may be important in reducing disparities. That paper can be found on the Finding Answers website [here](#). On a related note, and not surprisingly, a recent report funded in part by the Robert Wood Johnson Foundation indicates that pay-for-performance in hospitals may have unintended effects on racial/ethnic disparities. That report can be found [here](#).

In order to begin to address these concerns and the overall lack of knowledge about incentive-based interventions, Finding Answers funded evaluation projects for five different incentive-based quality improvement activities that were deliberately designed to reduce disparities or at least improve outcomes for a specific patient population. Three projects focused on patient incentives and two focused on provider incentives. This document contains descriptions of three completed Finding Answers grantee projects with brief overviews of their findings; Baylor College of Medicine (provider-focused incentive), Hudson Health Plan (provider-focused incentive) and CIGNA HealthCare (patient-focused incentive). The three completed projects show mixed-results when taken as a whole. This document also contains descriptions of two projects that are in-process but for which we do not yet have results; WellPoint (patient-focused incentive) and Aaron E. Henry Community Health Services (patient-focused).

Designing incentive-based interventions is a complex endeavor requiring significant forethought and planning. Incentive-based approaches to improving quality and reducing disparities are still not well understood and those pursuing incentive-based activities in an attempt to ameliorate disparities should actively monitor process and outcome measures.



Baylor College of Medicine

PROJECT

Monetary incentives are given to providers and provider teams to follow hypertension care plans recommended by national guidelines.

Health care personnel are eligible to receive a monetary reward for each randomly sampled patient with hypertension. Half of the reward is based upon whether the patient is receiving guideline-recommended antihypertensive medications. The other half is rewarded if the patient has controlled blood pressure or receives a guideline-recommended clinical response to uncontrolled blood pressure.

Rewards can be paid in two ways; to physicians only or to groups comprised of physicians and non-physician team members. Group reward payments are based upon the aggregate performance of physicians in the group. The group can choose to divide the payments equally or to use them to purchase health care equipment or supplies to improve quality of care. Rewards are received as additions to normal pay.

Monetary rewards are distributed approximately every four months. Audit and feedback reports summarizing performance over each of five performance periods are provided to participants via a password-protected study website. Feedback reports include data reflecting individual and group scores, earnings for the study period, and total earnings to date, as appropriate.

RATIONALE

The incentive systems are designed to change physician behavior without causing undesired, unintended consequences (i.e., gaming), setting unrealistic goals, or providing incentives that are too small.

The financial incentive structure is designed to reward a combination of process-of-care measures for which there is evidence that better performance leads to better outcomes (e.g., documentation of prescribing a medication) and the intermediate outcome measure of blood pressure control.

Having a single insurer, the VA, maximizes the effective size of the incentive. Incentives are paid every four months to make a clear and timely link between the desired behavior and the reward.

EVALUATION PLAN

Funded by Finding Answers in 2008.

Researchers are conducting a randomized controlled trial to test the effectiveness of financial incentives to promote guideline-based hypertension care and its impact on blood pressure control. Twelve different hospital-based VA outpatient clinics from 11 different states are participating in a randomized controlled trial. Each hospital is randomized to one of four study arms: (1) physician-level incentive plus audit/ feedback; (2) group-level incentive plus audit/feedback; (3) physician- and group level incentives plus audit/feedback; an (4) audit/feedback only (control). Provider participants are full-time VA staff primary care physicians. All enrolled physicians in a medical center are placed in the same study arm. At those study sites randomized to the two arms testing a group-level incentive, the physician participants nominated up to 15 non-physician participants who work with them—both clinical and administrative support staff—to participate as part of their group. The proportion of African-

American patients receiving guideline-recommended antihypertensive medications and the proportion of African-American patients achieving appropriate levels of blood pressure control or receiving an appropriate clinical response to an elevated blood pressure are being evaluated.

SUMMARY FINDINGS

The proportion of hypertensive African-American patients who achieved BP control or received an appropriate response to uncontrolled BP in the final performance period was greater for incentive arm physicians than for control arm physicians, but there was no difference between intervention and control physicians in the proportion of these patients receiving guideline-recommended antihypertensive medications. Reassuringly, we found no evidence that adverse selection was responsible for performance gains in the intervention arm either via “cherry picking” of patients or reducing the frequency of visits.

CONTACTS

Kate L. Simpson
ksimpson@bcm.edu

Laura A. Petersen, MD, MPH
laurap@bcm.edu

Hudson Health Plan

PROJECT

Health plan reaches out to enrollees and provides bonus payments to participating primary care providers for high-quality, patient-centered care.

Hudson sends members with diabetes a letter reminding them of the importance of an annual flu shot and enumerating the other key components of their diabetes care. Sometimes the letters are customized to indicate the particular services needed by the patient. A gift card is offered to members who complete a visit with their primary care physician.

Practices can earn up to \$300 per patient annually for complying with care standards. There are several individual screenings (e.g., blood pressure, HbA1c, LDL cholesterol) and immunizations (e.g., pneumococcal and influenza) which have payments attached to them. Reaching certain health outcome levels, as well as achieving relative improvements are also incentivized. Provider payments and performance reports are delivered by Provider Relations representatives during an annual meeting where overall outcomes and opportunities for improvement are discussed.

RATIONALE

Pay-for-performance programs can improve outcomes for racial and ethnic minority patients, provided that they are designed to reward patient-centered care rather than population-wide results. Programs relying exclusively on population-wide outcome measures may encourage providers to avoid less adherent or sicker patients, exacerbating disparities or leaving them unchanged. The incentive amount is based on an estimate of provider effort needed, available resources, and prior studies investigating the magnitude of incentive needed to engage provider interest.

By encouraging the regular monitoring and testing of diabetic patients, this pay-for-performance program hopes to improve overall health and quality of care. Medium and long-term savings in emergency care and inpatient costs may be realized, while near-term costs of care and medications may increase. It is possible that any long-term benefits will accrue once patients are no longer members of the plan.

EVALUATION PLAN

Funded by Finding Answers in 2008.

A pre-post analysis of diabetes cost and quality measures is being conducted to compare changes over time in process measures of diabetes quality for Hudson Health Plan to those reported or competing Medicaid health plans in New York State. The primary measures include HbA1c testing, LDL cholesterol testing and retinal exam. Individual screening rates and measures of service utilization are also being captured.

Primary care providers are being surveyed to determine their satisfaction with the program and how it was designed. The evaluation is also quantifying barriers to adoption

of the program, and is evaluating the impact of a pay-for-performance program on utilization and total health plan spending for racial and ethnic minority enrollees with diabetes.

SUMMARY FINDINGS

Analysis of data shows no significant impact on measures of diabetes clinical care or use of services by Hudson members with diabetes over the 4 years of data examined. The hypothesis was that improving diabetes care for all Hudson enrollees would attenuate racial disparities in care. As there was no significant impact overall it is not surprising that there was no significant change in disparities.

CONTACT

Taylor Mrazeka

Supporting Excellence Project Manager

tmrazek@hudsonhealthplan.org

914-372-2023

CIGNA HealthCare

PROJECT

Patients are offered financial incentives to make an appointment with their doctor. Patients are sent a letter with hypertension education materials, a wallet-size blood pressure health record, and an offer to receive a \$15 gift card if they visit their doctor within the next two months.

A second mailing goes to patients who have not scheduled an appointment within four months of the first mailing. Participating physicians receive a letter introducing the initiative and its goals, educational materials on plain language communication with patients, and a copy of the materials being sent to their patients. The prepaid debit cards are mailed to patients as soon as a claim for the doctor visit is received by the health plan.

RATIONALE

Insured, low-income minority populations may be motivated to visit their physician and improve their hypertension self-management through financial incentives. These incentives may be effective even if the amount is relatively small, especially if the incentives offset barriers to care such as the costs of transportation and childcare. By motivating patients to see their physician, this study may improve both short- and long-term health outcomes. Encouraging patients to make an appointment with their doctor and providing education materials can potentially help convince a patient that he or she has an active and important role in his or her own health. This increased motivation may improve health outcomes by increasing disease self-management behaviors, treatment adherence, and physician-patient communication.

EVALUATION PLAN

Funded by Finding Answers in 2009.

Eligible members with hypertension are being randomized into one of three groups: one receives educational materials only; a second group receives both educational materials and an offer for the \$15 incentive; and a third group (a control group) receives their usual care. Blood pressure levels and related measures (including cholesterol levels, body-mass index and medication adherence) are being collected at six- and 12-month follow-up periods. Formative evaluation methods are being used to gain a deeper understanding of the processes through which the incentive programs work or do not work. These evaluations include semi-structured interviews with CIGNA managers and administrators and participating study physicians, as well as focus groups with patient participants and brief patient telephone surveys. These formative evaluations are exploring the feasibility and sustainability of the incentive program on a larger scale.

SUMMARY FINDINGS

Findings from this evaluation suggest that financial incentives were associated with a small increase in a physician visits by six months after the implementation of the initiative; there were no significant differences between any study arm at 12 months. The initiative

did not have a significant effect on number of physician visits or on lowering blood pressure among the full sample. Racial/ethnic groups did not respond differently to the initiative, suggesting that the initiative did not contribute to a reduction in racial/ethnic disparities in HTN. Post-hoc analyses of patient subgroups suggested that individuals with SBP between 120 and 139 or DBP between 80 and 89 at baseline may have benefited from the educational materials, and this association should be the focus of future study.

CONTACT

Kathryn Pierce, BSN, MBA
Director of Clinical Quality, CIGNA HealthCare
Kathryn.Pierce@cigna.com

WellPoint

PROJECT

Monetary incentives are directed at patients and coupled with culturally tailored outreach and education materials.

The incentives are based on improving HbA1c levels, and the schedule of incentives will incorporate several factors. Those factors include: frequent monitoring of HbA1c, payments for achieving small, manageable milestones in reducing HbA1c, larger payments for larger reductions in HbA1c, larger required reductions in HbA1c levels for subjects with higher baseline levels, and larger required reductions in the long term versus the short term.

The culturally tailored outreach and education materials include DVDs, fast food and cooking guides, a fotonovela, a depression awareness guide, and webinars. Two rounds of postcard reminders are sent to members to encourage use of the materials. The outreach materials were developed collaboratively with Latino and African American members of WellPoint's health plans in order to be culturally relevant. WellPoint employed qualitative participatory research techniques to determine members' knowledge of diabetes and how they get this information, resulting in clear guidelines for cultural themes to be addressed in a health education program that is effective despite inter- and intra-cultural differences.

RATIONALE

This intervention aims to improve glycemic control in patients with poorly controlled diabetes through a variety of mechanisms.

Monetary incentives are intended to provide extrinsic motivation for patients to take the steps required to improve control of their diabetes. The schedule of incentives, based on principles from behavioral economics, attempts to motivate patients in a variety of ways. In particular the incentive system was developed to motivate patients who are making slow progress and prevent them from becoming discouraged; reward greater effort and success in achieving glycemic control; and promote eventual achievement of good glycemic control.

The culturally tailored outreach is intended to influence the context in which patients make decisions that affect glycemic control, thereby potentially amplifying the effect of the monetary incentives, and to provide the intrinsic motivation, information and support members need to sustain glycemic control after the incentives are withdrawn.

EVALUATION PLAN

Funded by Finding Answers in 2010.

Researchers at the UCLA Division of General Internal Medicine and Health Services Research are conducting a randomized controlled trial to assess the effect of the intervention on glycemic control over an eight-month period in African Americans, Latinos

and Whites, and to determine whether improvements in control are sustained after the monetary incentives are removed.

To gain insights into possible mechanisms for the impact of the intervention on glycemic control, the effects of the intervention on medication adherence, patient activation, self-management behaviors, changes in medication regimens, number of physician visits, and participants' self-reported experiences with the intervention are also being measured. The cost of implementing the intervention and its effects on medical care costs is being measured in addition to its effects on LDL cholesterol levels and resource use. Lastly, qualitative measures are assessing barriers and facilitators to implementing the intervention and the impact of the intervention on health plan and provider groups.

SUMMARY FINDINGS

Not available. The project recently completed its first year of a three year implementation and evaluation study.

CONTACT

Grace Huang Ting, MHA
Health Services Director, WellPoint, Inc.
grace.ting@wellpoint.com

Aaron E. Henry Community Health Services Center

PROJECT

Patients receive cash incentives for positive health behaviors and health outcomes. Nurses lead a comprehensive care management program which includes a cash incentive program for uninsured patients suffering from either hypertension or diabetes.

The patient-centered program focuses on education and self-management. Patients who show positive health outcomes (weight management, aerobic activity and medication adherence) receive financial incentives. Financial rewards up to \$408 are distributed on a quarterly basis for one year.

To promote the maintenance of healthy behaviors, 40 percent of the total reward earned is withheld from the patient until the program is completed.

RATIONALE

A care management program that includes patient-focused incentives has the potential to improve standards of clinical care, while also reducing health care costs. This program incorporates health coaching, care support service delivery and direct financial incentives.

Cash incentives for uninsured patients have the potential to promote wellness behaviors and a healthy lifestyle, which in turn may improve clinical outcomes and reduce overall health care costs. Uninsured patients may be particularly responsive to this type of reward system, due to the economic challenges they face.

Furthermore, large financial incentives may be more motivating than small ones. In addition to the financial incentives, patient education information and self-management tools are provided to encourage healthy lifestyle changes such as medication adherence, weight loss and increased physical activity.

EVALUATION PLAN

Funded by Finding Answers in 2009.

Uninsured patients with either diabetes or hypertension are being randomized into either the control group or one of seven intervention groups representing all combinations of incentives for weight loss, exercise and/or medication adherence. Each behavior category group that the patient is placed in has the potential to reward that patient with separate cash incentives: patients placed into multiple behavior change groups have the potential to receive larger incentives than those placed in fewer groups. The program is lasting for one year. Researchers are examining a variety of health behavior outcomes, including weight loss, physical activity and self-reported medication adherence. Researchers are also tracking blood glucose levels, blood pressure and cholesterol levels. The study is examining whether patients receiving larger incentives show a greater improvement than patients receiving smaller incentives. Researchers are also evaluating the overall cost effectiveness of the program by tracking inpatient and outpatient health care expenditures.

SUMMARY FINDINGS

Not available. The project recently completed data collection and is currently analyzing data.

CONTACT

Ashish J. Abraham, MD, MBA, MHSA
Chief Executive Officer, Altruista Health
aabraham@altruistahealth.com