Financial Incentives

PURPOSE OF THE STUDY
The purpose of the study is to evaluate how incentives can impact participation in a Healthy Solutions for Life health coaching program.

STUDY DESCRIPTION
The study is an intervention testing the effectiveness of a lottery incentive for improved participation in a wellness program targeted to parents with children that have asthma. At least three hundred (300) English- or Spanish-speaking adults who have a child that is eligible for the Healthy Solutions for Life pediatric asthma program will be invited to participate in the study. Participants will be recruited from two Centene health plans (Louisiana Healthcare Connections and Sunshine Health). Consent is required at the beginning of the study. Participants will be randomly assigned to the following groups:

- **Lottery incentive.** Members will be offered a one-in-five chance to win $10 in their CentAccount every two weeks. The member can claim their incentive only if they kept their health coaching appointment during that two-week period.
- **Fixed incentive.** Members will receive $15 in their CentAccount for completing six coaching calls with a health coach within their first three months of enrollment.

The varying amounts were determined by both existing Medicaid member incentive limits and by calculating expected values. The expected value of each phone call is roughly equivalent across both groups, maximizing the member’s chances of completing a call. In Louisiana, restrictions on the amount that Medicaid recipients may receive in health incentives also kept the values for both groups below $20. Washington University maintains responsibility for overseeing the program lottery. This includes conducting the bi-weekly lottery drawing and electronic and mail communications with participants about the lottery. There are several procedures that all study groups will be asked to complete. The standard program length is one year, while the pilot intervention phase of the program will be implemented and evaluated over a six-month period. However, members are enrolled in the study for only three months and are asked to schedule and finish two coaching calls each month, receive appointment, and incentive reminder messages (mail and text), and must consent to participate in the study. Unique to this intervention, we will also be communicating with participants by text message for the purpose of sharing results of the lottery drawings. Participants in the lottery group who consent to share their cell phone numbers will receive text message updates from the study team following each lottery, with a friendly reminder to complete the next call before the two-week deadline. Control group participants receive a similar message that indicates their calls completed to date and the number of calls remaining before they can receive an incentive. The eligible winner is notified that their number was drawn and that they will receive their reward because they completed a coaching call. But the non-eligible “winner,” whose number was drawn in the lottery, is told that they are ineligible to receive the reward because they did not complete a coaching call. All members receive a follow-up text message that reminds them of the next lottery drawing and includes the phone number to call if they need to reschedule.

SIGNIFICANCE AND PRELIMINARY STUDIES
Healthy Solutions for Life provides families with access to a respiratory coach for improved asthma self-management at no cost. Preliminary enrollment figures for similar programs reveal that just over 20 percent of all eligible families take advantage of such health and wellness benefits. Of these enrollees, 36 percent drop out immediately following completion of an initial health assessment (IHA). Incentives have been shown to increase participation. This study will determine the type of incentive that is most attractive to members. As a result, we expect that more members will participate in and benefit from the program. Potential benefits related to this intervention include:

- Increased participation in coaching calls
- Access to one additional coaching session
- Convenience in the delivery of wellness program
- Increased time with health professional at no cost
- Improved motivation for participation
- Economic benefits associated with financial incentive
Illustrating their growing importance, 82 percent of employers offered incentives for health behavior change in 2013 (Volpp & Galvin, 2014). Incentives for health behavior change can take many forms, but most common are financial (e.g., cash, gift card) and token incentives (e.g., Fitbit, iPod). Evidence has routinely demonstrated that planning and participation behaviors are influenced by pervasive cognitive biases (Becker, 1962; Bondt & Thaler, 1994; Jolls, Sunstein, & Thaler, 1998; Sunstein, 2003; Ariely, 2009). Procrastination, inertia and status quo bias can pose barriers to acting on individual preference and in one’s best interest (Johnson, Steffel, & Goldstein, 2005; Lee, Amir, & Ariely, 2009). In the realm of wellness programming, the use of incentives has become a widely used remedy to these biases (Volpp et al., 2011). Psychological research suggests that incentives for health behavior promotion work in part by invoking individuals’ extrinsic motivation, producing feelings of social commitment to a plan of action (Higgins et al., 2012; Garbers & Konradt, 2014). In addition, individuals are loss averse, inclined to act in ways that minimize feelings of economic loss and maximize perceptions of economic gain (Tversky & Kahneman, 1991). Incentives can thus motivate individuals further by establishing a legitimate sense of loss should an individual fail to take action (Stevens, 2014).

Financial incentives can promote positive health behavior change. Financial incentives have been effective at targeting behavioral outcomes such as smoking cessation, weight loss, medication adherence, and vaccination adherence (Marteau et al., 2009). Evidence has further demonstrated that low-income and minority populations may be particularly responsive to the behavioral effects of incentives (Haff et al., 2014; Heil et al., 2008; Long et al., 2012; Paul Ebhohimhen & Avenell, 2008). Health behavior researchers have tested a variety of financial incentive types (e.g., vouchers, gift cards, traditional cash transfer, rebates). More recently, lottery incentives have shown great promise in motivating a range of health behaviors for a myriad of at-risk groups (Haff et al., 2015). Lottery or similar incentive schemes have improved colon cancer screenings (Kullgren et al., 2014; Printz, 2015), weight loss (Petry et al., 2013; Volpp et al., 2008a), medication adherence (Volpp et al., 2008b), and diabetes self-management (Sen et al., 2014). Health researchers, practitioners and policymakers have insufficient evidence to design and implement effective, scalable incentive structures for at-risk families. In addition, we know very little about the unique behavioral effects of lottery incentives on participation. Investigating incentives as possible motivators to overcome program barriers is critical for improving access to, and enrollment of, no-cost health resources. The current study will extend previous findings by testing whether a regret lottery can significantly improve participation and completion behaviors over a fixed, guaranteed incentive.

**PRINCIPAL INVESTIGATOR AND SUPPORT STAFF**

The study team includes Michal Grinstein-Weiss, Rachel Tabak, and Samuel Taylor from Washington University in St. Louis; and Karyn Quinn, Ginny Barr, and Pat Kristen from Centene. Ramesh Raghavan from Rutgers provided consultation on study design and evaluation. We will use participation information to evaluate the study. Following data collection and completion of the study, the research team will assess the comparative effects of incentive treatments on:

- Enrollment from baseline to follow-up
- Attrition from program between baseline and follow-up
- Number of calls completed between baseline and follow-up
- Completion of six or more coaching calls between baseline and follow-up
- Duration (minutes) of coaching calls
- Missed coaching call sessions
- Completion of full program from baseline to follow-up

A summary of the study results will be shared with participating health plans and other stakeholders at the conclusion of the study.

**REFERENCES**


