Centene Center
for HEALTH TRANSFORMATION

Diabetes Retrospective Coaching Call Analysis

PURPOSE OF THE STUDY

The Diabetes Retrospective Coaching Call Analysis study will identify strategies to make health coaching programs more effective. It will retrospectively analyze the health coaching calls of members in the Healthy Solutions for Life diabetes coaching program. The results of this analysis will be used to define two randomized control trials (RCTs) that test the impact of applying behavioral economic theories to programs. The analysis will pinpoint new opportunities for applying behavioral economic practices. Ultimately, the results will enhance our ability to help members improve and sustain healthy behaviors by:

- Identifying cognitive biases that hinder optimal behaviors
- Adjusting programs to circumvent or remove existing barriers to healthy behaviors based on the insights provided by behavioral economics
- Weaving innovative, science-based practices, and concepts into our programs

WHAT IS BEHAVIORAL ECONOMICS?

The field of behavioral economics applies psychological insights into human behaviors to better explain decision-making. In a way, it stands at the intersection of economics and psychology. Traditional economic theory assumes that people are perfectly rational, are patient, and know objectively what makes them happy – then make choices that maximize this happiness. Behavioral economists, on the other hand, seek to develop models that account for the irrational ways that people procrastinate, are impatient, aren't always good decision-makers (and sometimes fail to make a decision altogether), go out of their way to avoid what feels like a loss, care about qualitative factors like fairness in addition to economic gain, and are subject to psychological biases that can cause them to interpret information in skewed ways. (Jodi Beggs, Harvard University)

WHO IS CONDUCTING THE STUDY?

Dan Ariely and his staff at Duke University's Center for Advanced Hindsight (CAH) will conduct the research and analysis with support from the Brown School of Social Work at Washington University. The Center for Advanced Hindsight's goal is to develop great insights about an extensive and diverse set of research projects including topics like health decisions by patients and providers, cheating, and social justice. All research is done retrospectively. One might even go as far as saying "in hindsight." Dan Ariely, the founder and leader of CAH, is a recognized researcher, teacher, and author in the field of behavioral economics. His work has been instrumental in advancing the world's understanding of human Principal Investigator and Support Staff behavior and the factors that influence it. He is the James B. Duke Professor of Psychology & Behavioral Economics at Duke University – where he also holds appointments at the Fuqua School of Business, the Center for Cognitive Neuroscience, the School of Medicine, and the Department of Economics.

HOW WILL THE STUDY BE CONDUCTED?

CAH will sample approximately 200 to 300 coaching calls of members enrolled in the diabetes coaching program. They will be divided into three random samples:

1. Members with successful HbA1c outcomes
2. Members with somewhat successful HbA1c outcomes
3. Members with unsuccessful HbA1c outcomes

The criteria for success will be changes in HbA1c values. Based on clinical guidelines, HbA1c is the best indicator of how well a member's diabetes is being controlled.

The calls will be transcribed, reviewed, and coded by researchers from CAH. Two types of review will be conducted:

1. Human review – where tags will be created for the calls (e.g., member mentioned family, time, pain, etc.)
2. Computer review – using NVIVO software that uses pattern-based auto coding to code large volumes of text quickly, which helps researchers analyze qualitative information

Researchers will analyze the relationship between outcomes and call content to create a predictive model for an initial sampling of calls. A second sampling of calls will be analyzed – for which outcomes will not be shared – as a way to verify the model's ability to accurately predict outcomes.

WHO IS THE TEST POPULATION FOR THE SAMPLING OF CALLS?

Adults age 18 and older who are currently in the Healthy Solutions for Life diabetes coaching program (or previously participated in 2014-2015) and have two HbA1c values taken within six to nine months of each other.

WHAT PERSONAL DATA IS COLLECTED AND HOW IS IT PROTECTED?

Member demographic, biometric, and qualitative data (i.e., call content) will be collected as part of the call analysis. All data will be stored in secure, password-protected electronic databases accessible only to those who have permission.

- Duke University researchers will have access to demographic, biometric, and qualitative data.
- Washington University researchers will have access to demographic, biometric, and qualitative data.
- Healthy Solutions for Life staff access will remain as it is today to conduct their jobs (business as usual).

WHAT HAPPENS ONCE THE ANALYSIS IS COMPLETED

After completing the analysis, the CAH will work in conjunction with Healthy Solutions for Life staff to identify barriers (e.g., cumbersome assessments, lacking motivation, or priority), classify them, and prioritize those that are behavior related. From there, we will develop a tactical set of recommendations that are:

- Grounded in the principles of behavioral economics
- Aimed at enhancing our ability to engage more members in coaching
- Effective in helping members adopt – and sustain – healthy behaviors

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