

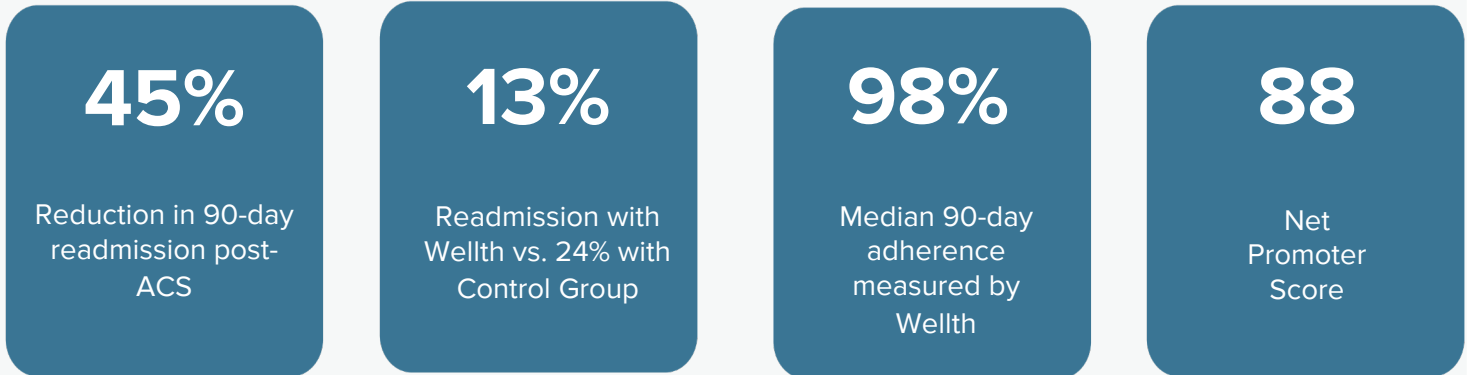


## CASE STUDY

Randomized Controlled  
Trial shows  
Wellth reduces hospital  
readmissions  
post-ACS by 45%



# The Results



These results provide quantitative proof of Wellth’s real impact on its members lives and the priorities of health plans and providers.

By making healthy behaviors attractive and attainable, Wellth creates motivation—leading to increased patient engagement, improved medication adherence, and, ultimately, positive patient outcomes.

## Program Summary

**Start Date:** June 2019  
**Location:** 2 UPenn acute care hospitals  
**Disease State:** Acute Coronary Syndrome (ACS)  
**Insurance Coverage:** Commercial, Medicaid, Medicare  
**Behavior:** Medication adherence

**Sources:** Riegel, B., Stephens-Shields, A., Jaskowiak-Barr., Dause, M., Kimmel S.E. (2020). A behavioral economics-based telehealth intervention to improve aspirin adherence following hospitalization for acute coronary syndrome.

Pharmacoepidemiology and Drug Safety, 29(5), 513-517. doi:10.1002/pds.4988

# Improving heart health with medication adherence

Aspirin (ASA) is a standard medication prescribed to patients after being discharged from the hospital post-Acute Coronary Syndrome (ACS). Nonadherence to ASA regimens is common and a significant contributor to subsequent cardiovascular readmissions and death.

This pilot study determines how well Wellth, a tool rooted in principles of behavioral economics, could improve ASA adherence after hospitalization from two specific ACS events: heart attack and unstable angina, which can lead to heart attack.

All trial participants received 90-day ASA supplies in “smart” pill bottles, which detect pill bottle openings electronically.

Participants in the intervention arm also received access to the Wellth app, which is built on the proven principles of behavioral economics. They were offered \$50 per month as an incentive to take their ASA daily and lost \$2 each day a dose was missed. These participants also received daily reminders and were required to verify their medication-taking by uploading a photo of the pill in their hand to the Wellth app.

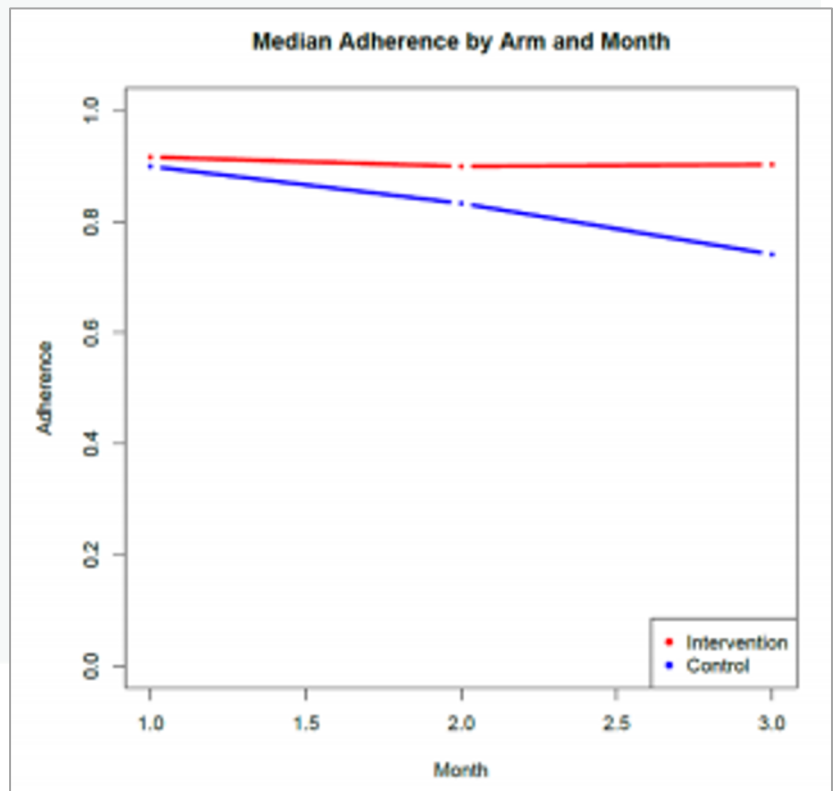
ASA adherence and readmissions were measured over the 90-day period. For statistical comparisons, adherence was measured through smart pill bottle openings, but it was also tracked through the Wellth app.

# The Findings

The impact of the Wellth intervention on clinical outcomes was substantial. Participants who participated in the Wellth program were 45% less likely to be readmitted to the hospital than those in the control arm (24% vs. 13% 90-day readmission rates).

These outcomes can be attributed to similar trends in ASA adherence between the two groups. Adherence remained high, around 90%\*, in the Wellth group throughout the study period but fell in the control group from ~90% at the beginning, to ~81% at the end.

**This portrays Wellth's ability to create lasting behavioral change, compared to less engaging digital health tools.**



\*Due to smart pill bottle failures, several participants' smart pill bottle data were unusable. However, according to adherence data from the Wellth app, the intervention group had adherence at 98-100% throughout the entire study period. In the chart above, the intervention group's adherence data from the app are represented by the green dashed line, while their data from the smart pill bottles are represented by the red line.

# The Science Behind the Success

If we fail to grasp why someone isn't prioritizing their health, we can't change their unique set of circumstances.

We use the science of behavioral economics combined with an appreciation for human nature.

This enables us to uncover and address the unique obstacles that prevent people from forming the habits necessary to create lasting behavior change.

## BEHAVIORAL ECONOMICS PRINCIPLES



**LOSS  
AVERSION**



**ENDOWMENT  
EFFECT**



**PRESENT  
BIAS**



**INTENT-BEHAVIOR  
GAP**

Wellth is built on a foundation of empathy, using tools and techniques that meet people where they are to build healthy habits that last a lifetime. We leverage the behavioral economics principles of **Loss Aversion, Present Bias, the Endowment Effect and the Intent-behavior Gap.**

These principles allow us to respond to how people actually behave—rather than how we believe they should behave. It also allows us to personalize each incentive plan to each individual member.

**It's science-based, simple to use, and proven successful.**

# About Wellth

Wellth is a health equity focused behavior change company that creates motivation and habit formation in populations with chronic conditions. Backed by the science of behavioral economics, Wellth rewards members with daily, flexible financial incentives for submitting scheduled check-ins that align with their care plans.

Wellth aims to create a world where the standard of care motivates patients to adopt habits that optimize their long-term health.



## Contact Wellth



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