

To increase group exercise, study suggests rewarding the individual and the team

March 15 2016

Financial incentives aimed at increasing physical activity among teams are most effective when the incentives are rewarded for a combination of individual and team performance, according to new research from the Perelman School of Medicine at the University of Pennsylvania. The study, which examined the effectiveness of offering monetary rewards as part of workplace wellness programs, showed that people offered "a combined incentive" were nearly twice likely to achieve their goals as a control group. People rewarded based on only individual or team performance were no more likely to increase exercise than the control group who did not receive any incentives. Results are published today in the *Journal of General Internal Medicine*.

"Many employer-based [wellness programs](#) are using team-based approaches to engage their workforce towards achieving health goals, but the best way to offer rewards within these programs to change behavior is unknown," said lead author Mitesh S. Patel, MD, MBA, MS, an assistant professor of Medicine and Health Care Management at the Perelman School of Medicine and the Wharton School, and a staff physician at the Crescenz VA Medical Center. "The results of our clinical trial indicate that team-based incentives are more effective if they are designed to balance rewarding individual accomplishments and reinforcing elements of being on a team such as accountability and peer support."

In the study, 304 participants were given a goal of 7,000 steps per day for 26 weeks, with daily feedback on whether or not they achieved the

goal. Progress was tracked using a smartphone app. Teams were randomly assigned to the control group or one of three incentive groups in which a drawing was held every other day for the first 13 weeks where the winning team could receive up to \$50 per person. Participants could only collect the \$50 if they achieved the step goal (individual incentive arm), all four members of their team achieved the step goal (team incentive arm), or a combination in which individuals got \$20 if they achieved the goal and \$10 more for each of their three teammates who reached the goal (combined incentive arm). During the second half of the study, all participants continued to receive daily feedback, but without [financial incentives](#).

Results of the study revealed that participants in the combined incentive group achieved their goal 35 percent of the time, nearly double the success rate for the control and team incentive groups (18 and 17 percent, respectively), and still higher than the average success rate for participants rewarded based on individual performance (25 percent). Compared to the [control group](#), participants receiving the combined incentive had 1,446 more steps per day.

More than 96 percent of participants completed the full 26-week study despite no financial incentive during the 13-week follow-up period. The authors suggest the high engagement rate may be due to the smartphone-based approach to data collection and the design of the study which emphasized encouraging everyone to reach a minimum of 7000 steps rather than setting a higher goal that only the already active could achieve.

"Many employers use team-based competitions to incorporate a social component to their wellness program," said David A. Asch, MD, MBA, a professor of Medicine and Health Care Management, and director of the Penn Center for Health Care Innovation. "Our findings demonstrate that the design of incentives within these programs is important and that

while some designs are very effective, others are no better than not offering an incentive at all."

The authors suggest future studies might compare different methods of combining incentives to test the optimal amount and frequency of incentives as well as testing ways to sustain these behaviors over longer time periods. Social incentives such as accountability and peer support may be further tested by comparing team-based designs (such as those used in this study) to participating alone.

"The findings of our study shed light on how financial incentive programs can be used to change people's behavior towards better health, and how physical activity interventions and wellness programs can be better designed," said senior author Kevin G. Volpp, MD, PhD, a professor of Medicine and Health Care Management, and director of the Penn Center for Health Incentives and Behavioral Economics. "People are accountable to themselves but also to others and in this vein it may not be surprising that the incentive that provided rewards based on individual and [team performance](#) was most effective."

More information: Patel, M.S. et al. (2016). Individual versus team-based financial incentives to increase physical activity: a randomized, controlled trial, *Journal of General Internal Medicine*. DOI 10.1007/s11606-016-3627-0

Provided by University of Pennsylvania School of Medicine

Citation: To increase group exercise, study suggests rewarding the individual and the team (2016, March 15) retrieved 1 January 2023 from <https://medicalxpress.com/news/2016-03-group-rewarding-individual-team.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.