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Stratifying mortality risk

USING PHYSICAL ACTIVITY AS MEASURED BY WEARABLE SENSORS

Roughly three-quarters of Americans own a smartphone and half own a wearable device. As the wearable and smartphone markets grow, there is potential for incorporating physical activity information into the life insurance process to enhance customer experience while improving risk selection.

Munich Re assessed the effectiveness of physical activity as measured by wearable sensors in stratifying the mortality risk profile of a U.S. population-based dataset provided by Vivametrica, a health analytics company. Based on our analysis of Vivametrica's clinical research dataset, our experts conclude:

Physical activity as measured by steps per day effectively stratifies mortality risk.

Steps per day is an important predictor of mortality risk, and may be especially effective in identifying high mortality risk for sedentary behavior.

Steps per day provides additional segmentation of mortality even after considering traditional underwriting attributes, such as smoking status, BMI, cholesterol, blood pressure and health history of diabetes, cardiovascular disease and cancer.

Applications can include:

- Accelerated underwriting: triage cases to limit sedentary applicants from qualifying for the best risk classes, mitigating mortality risk.
- Traditional full underwriting: use physical activity as additional underwriting criteria, improving mortality experience.
- Customer engagement and awareness: develop rewards programs to cultivate healthy lifestyle choices, resulting in reduced healthcare expenses.

We believe the clinical data delivers robust support for using a wearables-based program to augment the current underwriting process, manage risk, and promote active lifestyles. Munich Re can provide assistance in program development, measurement, and monitoring to carriers considering a wearables-based program.
Come partner with us!

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