Biological Age Model (BAM)
Using Wearable Data to Empower Healthier Lives

Health is the new wealth

Customers today are more digitally-enabled, more health conscious and more demanding of customized products and services that offer greater freedom and flexibility. The insurance industry however often fails to keep pace, and consumers can face multiple pain points in their insurance journey:

- Despite the global trend towards health, consumers are rarely incentivized to improve their lifestyle and they are provided only limited advice on how to do so.

- Devices that are already a part of our day to day lives (such as wearables) are underutilized and not achieving their full potential to engage.

- Single point underwriting pays little attention to consumers' lifestyle and wellbeing after the underwriting is complete.

- Underwriting processes can be tedious and overwhelming, giving little consideration to the customer experience.

A wellness solution backed by science and technology

In partnership with key players in the wearable technology industry, we developed the Biological Age Model (BAM). BAM leverages wearable data to compute a person's Biological Age. Based on over 20 years of clinical data, BAM sets itself apart in being an evidence-based model for both mortality and critical illness risks.

At SCOR, we are passionate about finding solutions that empower consumers to live healthier lives. With the growing adoption of wearable devices and technology, SCOR and Vivametrica uncovered the ability to use real-time data to underwrite and to empower consumers to make informed lifestyle choices.
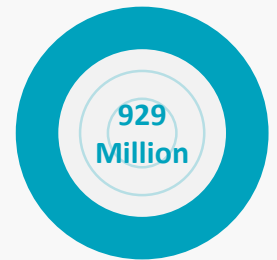
"Health is the new wealth"

The next consumer megatrend[1]

42%
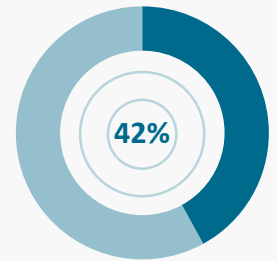
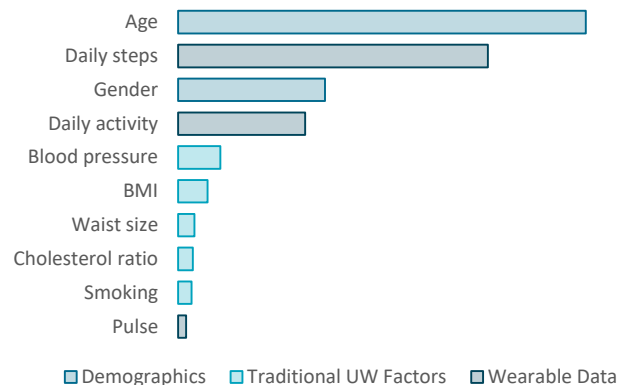Gen Xers that are part of a wellness programme[2]

45%
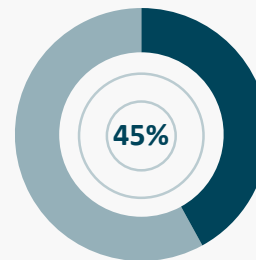
Millennials that are members of a wellness programme[2]

929 Million

Number of wearable devices globally by 2021[3]

Wearable data appears to be a stronger indicator of mortality than traditional underwriting factors

Factor	
Age	
Daily steps	
Gender	
Daily activity	
Blood pressure	
BMI	
Waist size	
Cholesterol ratio	
Smoking	
Pulse	

☐ Demographics ☐ Traditional UW Factors ☐ Wearable Data

[1]Euromonitor International – 2018 Megatrend Analysis: Putting the Consumer at the Heart of Business
[2]ReMark's 2017 Global Consumer Survey in Asia Pacific
[3]Cisco estimates that by 2021 there will be 929 million wearable devices globally, growing nearly threefold from 325 million in 2016 at a CAGR of 23%.

SCOR
The Art & Science of Risk
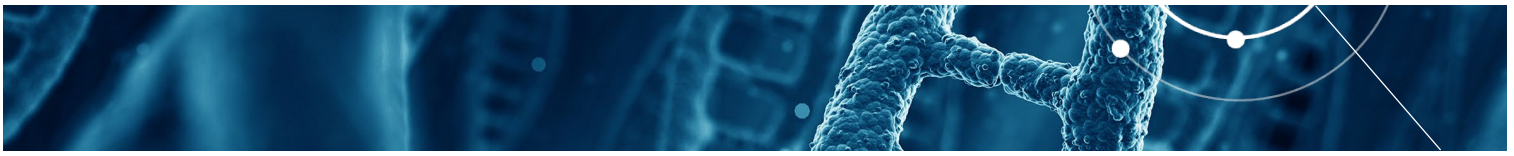
In this joint comprehensive study, our findings demonstrated that the number of steps per day has a strong mortality predictive power and is relevant for risk selection. The number of steps per day also appears to be a stronger indicator than traditional underwriting factors—standalone and combined.

The study suggests that wearable data is able to complement disclosures, health exams and fluids used during traditional underwriting, while enabling insurers to continuously update their risk assessment. This could ultimately lead to insurers replacing current health exams and fluids by leveraging steps and other physical activity measures, shared by wearable devices.

Not only are these findings applicable to mortality, but SCOR has developed a methodology to correlate the critical illness relative risk per condition to the relative mortality risk.

Targeted approach to helping consumers live healthier lives

In the age of the digital and health conscious consumer, solutions need to engage consumers in the way in which they live their lives. BAM combines science with technology to address key challenges in making insurance relevant to today's consumer:

- **Dynamic, real-time, technology enabled**

   The traditional one-size-fits-all pricing approach assumes all insureds within a group will live their lives in the same fashion—
   a far cry from the truth. BAM offers a continuous risk assessment and thereby enables dynamic underwriting. Continuous underwriting also minimizes risk, facilitates competitive pricing, speeds up the purchase cycle and improves the bottom line
   for insurers.

- **Moving beyond protection to motivating
   and rewarding healthier lives**

   For decades, interactions between insurers and insureds have mostly been transactional and not engaging. BAM's wellness program creates the opportunity for insurers to continuously engage, but also motivates consumers to live healthier lives.

- **Supporting consumers with health intelligence**

   From explaining how the simplest form of exercise (i.e. steps) can have a strong impact on mortality risk to real-time coaching on diet, exercise, sleep and stress management based on data provided by wearables.

BAM presents a new way of thinking about how we underwrite risks and how we partner with consumers to motivate healthy living. Not only is the model backed up by the art and science of risk, but it is a powerful enabler to empower consumers to make informed lifestyle choices.

The number of steps per day has strong predictive power for mortality and critical illness

Daily number of steps

Frequency	Actual	Predicted	Partial Dependance
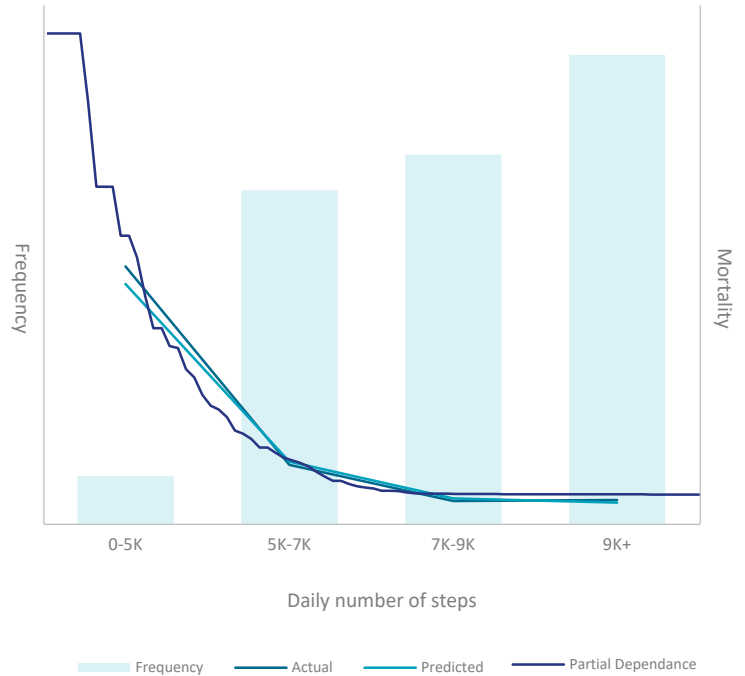
For additional information about BAM, please reach out to your market's SCOR representative.