

coverager

SCOR
The Art & Science of Risk

Health & Wellness

**THE CHANGING MINDSET OF
MODERN LIFE INSURERS**



Dear Readers,

We partnered with the Coverager team to help compile this report motivated by our strong commitment and desire to help the industry identify health and wellness solutions for clients and in turn help consumers live healthier and longer lives.

This report will provide you with a window view of how many companies featured in this publication are navigating our current environment. The integration of innovation and technology is driving dynamic developments in disease diagnosis and treatment. Although in the early stages, Electronic Health Records are being used as a new digital data source for risk assessment and potentially individual health assessments down the road. Wearables and engagement applications are allowing consumers to know “real-time” where they stand in their health journey.

When we began work on this publication in late 2019, we were excited to collaborate with many of the respected companies featured here that have made significant investments in the health and wellness arena. At SCOR, our work with partners like Garmin, Human API, Verisk, Sentio, BioSerenity, FOXO Bioscience and in particular ReMark (a SCOR wholly owned insurtech solutions provider) highlights our shared purpose and supports our goal of helping policyholders to live healthier and better lives.

As Coverager continued their work on this report during the early months of 2020, the world was changing drastically. The COVID-19 pandemic massively disrupted our sense of security and normality. And, as our anxiety rose with each passing day, we realized more than ever how important and fragile our health and wellbeing can be.

This report gives a broad overview of various health and wellness solutions in the market and a few deep dives with select companies who are aiming to broaden the life insurance ecosystem to enhance products and improve customer engagement, experience and mortality. This report also chronicles the evolution of many health awareness campaigns launched by insurance companies over time to help improve our health, change behavior and positively impact mortality.



At SCOR, we are seeking to increase public awareness by learning even more about the determinants of health, behavior change, chronic disease and the opportunities that exist for improvements in these areas. We are applying research, developing advanced algorithms and leveraging technology to help the industry innovate. But behind these innovations are a basic need for better insurance products and closer ties to policyholders to help promote disease detection, prevention and management – along with healthier lifestyles.

As the world’s fourth largest reinsurance group established more than 50 years ago, we realize we are in a unique position to positively influence consumers’ opinions and the way they think about life insurance. To this end, we are collaborating with our partners in the health and wellness space to align with the needs of our clients and their customers.

On Page 37, you will learn more about SCOR’s partnership with key players in wearable technology and our development of the Biological Age Model (BAM). ReMark developed the Good Life Inspire application (app) to collect data via a wearable or cell phone and use that data to calculate a person’s biological age. Based on more than 20 years of clinical data, BAM sets itself apart in being an evidence-based model for both mortality and critical illness risks.

In addition to the team at Coverager, there are so many people to thank for contributing to this state of the industry edition. At SCOR, we are proud of our affiliation not only with the journalists of this publication but the many disruptors who continue to support the life insurance industry and graciously contributed meaningful and quality content to this report.


Brona Magee,
Deputy CEO
SCOR Global Life




Transforming the Longevity Industry Using the Science of Epigenetics by FOXO BioScience

Since the 1700s⁽¹⁾, underwriters have been predicting human lifespan to manage longevity risk. The last major change in medical underwriting protocols for life insurance applicants was the introduction of blood collection to screen for HIV in the 1980s. Since then, medical underwriting has changed little despite new accelerated underwriting protocols. Enter the era of molecular biology and FOXO BioScience. Firmly positioned at the intersection of science and bioinformatics, FOXO is commercializing groundbreaking epigenetic biomarkers to address the challenges of accurately assessing health and wellness from self-reported questionnaires and invasive paramedical specimen collections.

What started as a keen insight that “epigenetic clocks” or molecular biological aging measures developed by Dr. Steve Horvath⁽²⁾ were highly predictive of mortality, has rapidly evolved into a next generation underwriting approach to traditional mortality underwriting for the life insurance industry.

Unlike genetics, which are fixed at birth and reflect the DNA inherited from one’s parents, epigenetics is based on individual choices and changes based on lifestyle and environmental factors. Depending on individual habits, such as tobacco and alcohol use, diet and exercise, stress level and sleep, our genes express differently. Changes in gene expression can ultimately be tuned to biological aging. Thus, the science of epigenetics can act as a powerful tool for underwriters seeking to assess health and wellness and predict individual human lifespan.

Since meeting with Dr. Horvath, FOXO founder and CEO Jon Sabes has been assembled a highly-skilled team of biological and machine learning data scientists, life insurance underwriting experts, and entrepreneurs to develop epigenetic technology and testing services to identify and quantify specific biomarkers of disease and aging, including tobacco, alcohol, drugs of abuse, biological age, risk classifications, as well as other clinical blood chemistries. In pioneering a precise new medical protocol, FOXO is set to

(1) Insurance Handbook. Insurance Information Institute <https://www.iii.org/publications/insurance-handbook/brief-history>

(2) Gibbs, W. Wayt Biomarkers and ageing: The clock-watcher. Nature.com <https://www.nature.com/news/biomarkers-and-ageing-the-clock-watcher-1.15014>

disrupt the global life insurance industry with a next-generation underwriting tool that is more accurate, consistent, and cost-effective than the traditional methods currently being used.

At the same time, FOXO is also supporting groundbreaking scientific discoveries by collaborating with scientists to develop much-needed tools and services to advance the science of epigenetics. FOXO played a pivotal role in the commercialization of the upcoming Infinium Mouse Methylation Array and will be the first company to give researchers access to DNA methylation array technology that supports diagnostic screening and therapeutic medicine in model organisms like mice.

In addition, FOXO is facilitating significant scientific breakthroughs worldwide with open source bioinformatic software that simplifies and automates preprocessing, quality control, and analysis of complex DNA methylation data being used by researchers to advance their understanding of the science of epigenetics. To learn how FOXO's epigenetic technology can help move your research or business forward, visit foxobioscience.com.

WEBSITE

foxobioscience.com

FOUNDED

2016

HEADQUARTERS

Minneapolis, Minnesota

FUNDING

N/A

OVERVIEW

FOXO BioScience (formerly Yousurance and Life Epigenetics) is a leader in epigenetic technology that supports groundbreaking scientific research and disruptive next-generation business initiatives. FOXO offers leading supervised machine learning and artificial intelligence technologies to identify epigenetic signatures related to biomarkers of human health and aging.