

2021

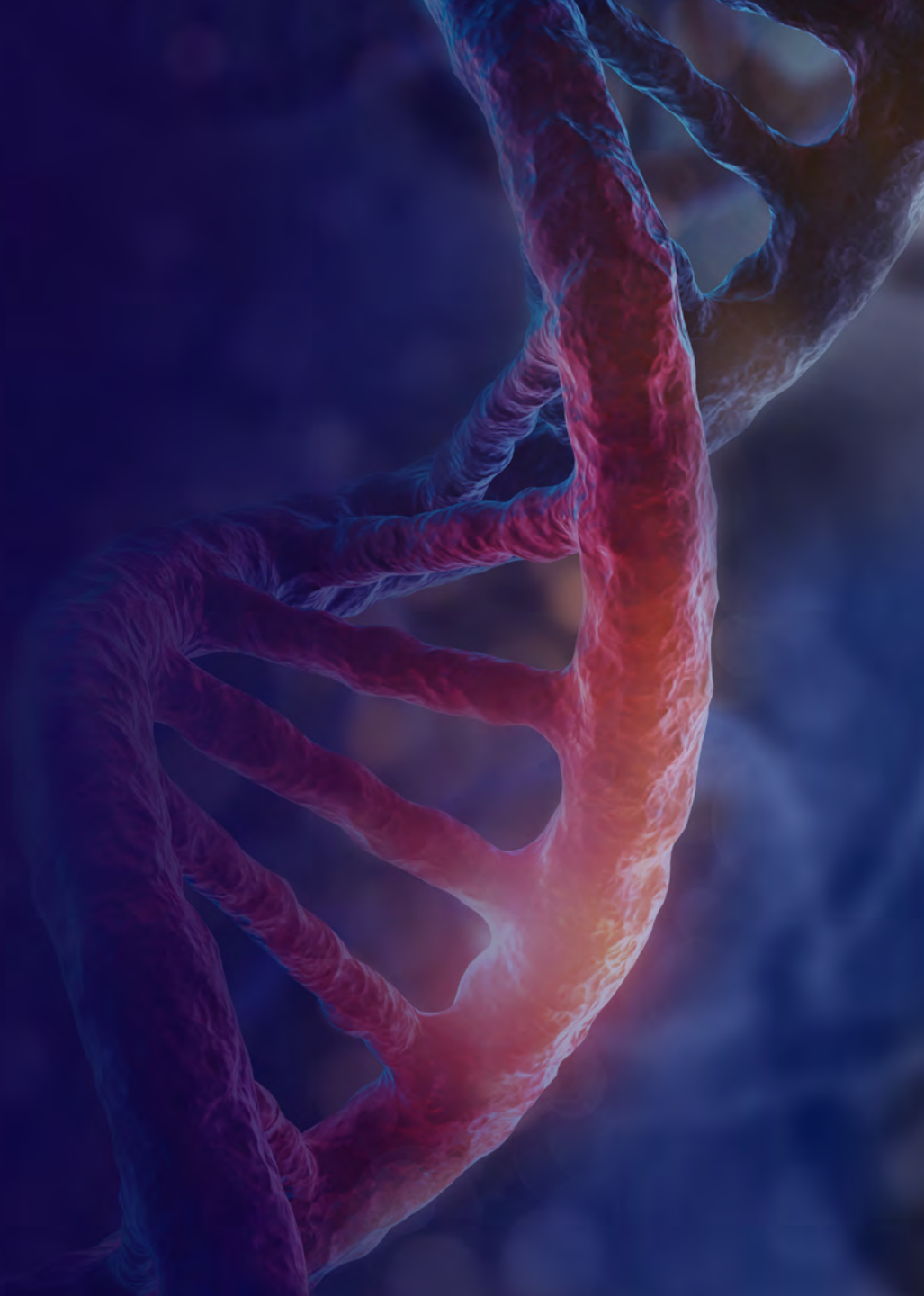
GENETICS

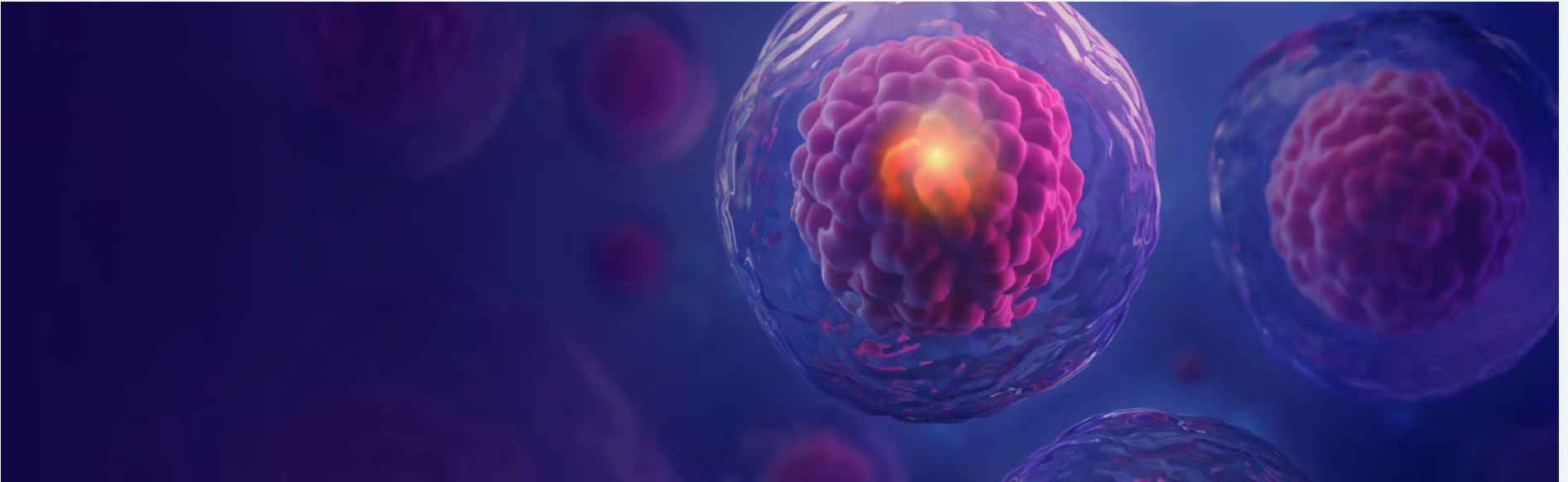
SURVEY RESULTS

PUBLIC REPORT

RG&A

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How is the insurance industry using, or planning to use, genetics-based products and services to support or enhance wellness? 30 life and health insurers from around the world participated and provided information about their current plans, initiatives, challenges, and opportunities.

This report summarizes those findings.

ABOUT THE SURVEY

30 RESPONDENTS GLOBALLY

RGA conducted an online survey of clients globally through rolling implementations based on COVID recovery from July 2020 through to January 2021 – surveying multiple markets across Asia-Pacific, Europe, Middle East and Africa, the U.S. and Canada, and Latin America. – surveying multiple markets across Asia-Pacific, Europe, Middle East and Africa, the U.S. and Canada, and Latin America.



APAC

13%



EMEA

27%



US, CANADA

53%



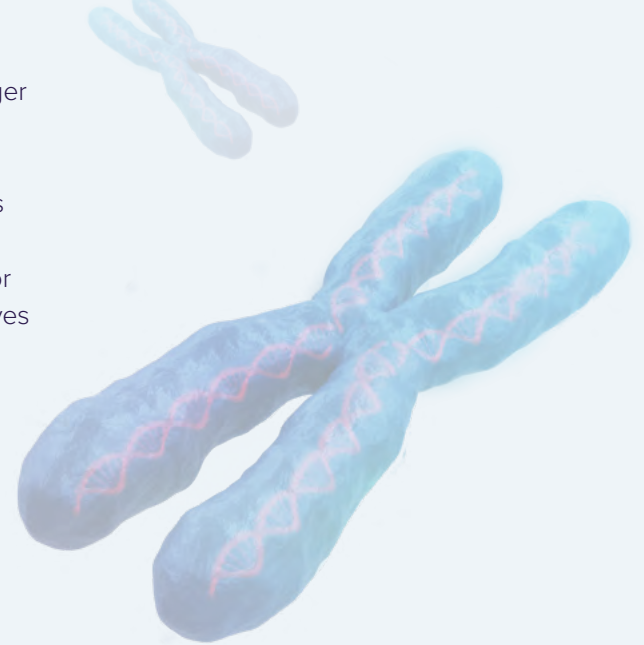
LATIN AMERICA

7%

WHAT ARE THE OPPORTUNITIES FOR INSURERS?

While current usage of genetics-based tools and products is relatively low, due in part to the regulatory landscape for many regions, there is a clear opportunity for genetics to support policyholders living longer and healthier.

Genetic testing can help relieve chronic physical and mental issues and make it possible to match drugs and therapies with genetic profiles to reduce adverse drug reactions (ADRs) for better, more precise outcomes. (ADRs alone cost insurers billions of dollars a year globally.) Genetic profiles can also allow for a more holistic, proactive, and collaborative relationship between insurers and policyholders that improves longevity and quality of life.



KEY OBJECTIVES TO OFFER GENETIC PROGRAMS

INCREASED
PARTICIPATION
AND WILLINGNESS
ON THE PART OF
CLAIMANTS AND
POLICYHOLDERS

IMPROVE OR
MAINTAIN THE
HEALTH OF
POLICYHOLDERS

OFFERED AS
A PERK TO
POLICYHOLDERS

INCREASE NEW
POLICY SALES



KEY SURVEY FINDINGS

13% currently have a focus on genetics or a genetics-related initiative underway

20% reported having plans for a “low level of investment” for future allocation of resources or budget

63% of respondents indicated that they are not prepared enough, or at all, for increased use of genetic testing in their market.

Genetic related activities can be a means to promote healthier lifestyle and improved health outcomes through customized care. The following RGA articles highlight the opportunities (and challenges) for scientific and commercial usages:

- [Genetic Testing in Insurance: Challenges and Opportunities I](#)
- [Genetics and Insurance: Challenges and Opportunities II](#)
- [Metabolic U-Turn: Type 2 Diabetes Mellitus Remission and the Implications of a Turn in the Right Direction](#)

PERCEIVED CHALLENGES

- Government regulations
- Costs associated with genetic testing
- Engaging with customers to enroll and continue to provide updated information to drive better outcomes
- Organizational prioritization to recognize the key role genetics plays within medicine/health

Despite concerns over genetic testing for underwriting and other insurance purposes, the real driver for success of genetic testing in the life and health insurance industry is in motivating a healthy lifestyle and increased consumer engagement. By keeping our insured population healthier and improving the prediction, treatment and management of chronic diseases, this will yield a great cost savings for insurers in the long-term.



RGA is ready to help you expand your current genetics-based tools and products, or explore the potential opportunities that are becoming available in this area.

If you require any support or have any questions please contact the [RGA/RGAX Genetics & Collaboration Strategy Group \(RGCSG\)](#).

CURRENT AREAS OF STRATEGIC SUPPORT OF GENETICS-RELATED ACTIVITIES

1. POST ISSUE HEALTH & WELLNESS
2. LEAD GENERATION
3. CONSUMER ENGAGEMENT
4. PHARMACOGENOMICS (PGX) TESTING AS A STANDARD OF CARE, IMPROVING EFFICACY AND ADHERENCE TO TREATMENT



IMPROVING HEALTH OUTCOMES THROUGH CONSUMER ENGAGEMENT

IMPROVING HEALTH OUTCOMES

- Genetics as a proactive predictor to help manage mental, physical health and diseases for policyholders
- Improved nutrition and lifestyle factors
- Chronic Disease Management
- Pharmacogenomics - tests to determine the most effective drugs for treating chronic illnesses or pain
- Precision medicine, precision nutrition

CONSUMER ENGAGEMENT

- Future wellness and engagement opportunities
- Personalized products & servicing
- Claims Reduction
- Better diagnostics in disability claims management



SURVEY PARTICIPANTS

- Aegon
- AIA Group
- Allianz SE Reinsurance Branch Asia Pacific
- Allianz SpA
- American Family
- Dearborn Life
- Discovery Life
- Equitable Life of Canada
- Guardian Life
- Investec Life
- MAG SEGUROS
- Manulife
- Medavie Blue Cross
- Northwestern Mutual
- Oman Insurance Company
- Principal Financial Group
- Prudential Financial (U.S.)
- Prudential PLC (Hong Kong)
- RBC Insurance
- Reale Mutua
- Royal Neighbors of America
- SAHL Life
- Securian Financial
- Squarelife Insurance
- State Farm Life
- Sun Life
- The Standard Insurance Company
- Zurich

GLOSSARY OF TERMS

Carrier testing - a type of genetic testing used to determine if a person is a carrier of a specific genetic disorder. This kind of testing is used most often by couples considering becoming pregnant to determine the risks of their child inheriting one of these genetic disorders.

Clinical Validity - accuracy with which a genetic test identifies a particular clinical condition (sensitivity, specificity, positive predictive value, negative predictive value).

Diagnostic testing – genetic testing performed specifically for the purpose of making or confirming a diagnosis.

DTC (direct to consumer) – genetic testing kits purchased online or in stores by those who want to learn more about their ancestry or health.

Epigenetic testing – the study of changes in genetic material other than an alteration of the genetic code or sequence.

Liquid biopsies – a test done on a sample of blood or other body fluid to look for cancer cells or genetic material from a tumor.

Newborn screening – Newborn screening is a genetic test done shortly after birth to test for significant diseases that usually show no symptoms in the immediate newborn period.

Nutrigenomics – the interaction of nutrition and genes, particularly with regard to the prevention or treatment of disease.

Pharmacogenetics – how variation in one single gene influences the response to one drug.

Pharmacogenomics – how all of the genes (genome) influence the responses to drugs.

Precision medicine – medical care designed to optimize prevention, efficacy, or therapeutic benefit for individual patients, especially by using genetic or molecular profiling which may include nutrigenomics and pharmacogenomics – the right treatment, to the right patient at the right time.

Predictive and pre-symptomatic testing – the use of a genetic test in an asymptomatic person to predict future risk of disease.

Prenatal testing – Prenatal screening and diagnosis as part of prenatal care testing focusing on detecting problems with the pregnancy as early as possible.

Polygenic risk scores – polygenic risk score is determined based on variation in multiple genetic loci and their association with risk of disease.

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