



Checking the Pulse

A Global Survey on the Evolving Roles
of the Insurance Medical Director
2021

RG&A

Foreword

RGA conducted a first-of-its kind survey called Checking the Pulse: A Global Survey on the Evolving Role of the Insurance Medical Director. The survey explores how the medical directors in the insurance industry are adapting to this changing role and provides a snapshot of the current role and its influence in markets around the world.

The survey insights will help facilitate RGA's continued commitment to developing solutions and providing support to our clients by better understanding future trends, challenges, and opportunities impacting the role of the medical director.

RGA is grateful to all participating medical directors for their valuable insights into the evolving role of the medical director. The role is pivotal to ensure that life and health insurers are able to meet increasingly complex underwriting and claims case management challenges, as well as developing new skill sets to meet changing demands which entail more strategic support of the business.

RGA conducts numerous experience studies and surveys on industry topics on behalf of our clients. These analyses provide clients with tools to increase efficiencies and enhance profitability. We hope the survey results provide insights and enable the life insurance industry to plan for future developmental needs with respect to life and health insurance.

Kind regards,

Dr. Sheetal Salgaonkar

VP, Global Medical Director
ssalgaonkar@rgare.com

Dr. Daniel Zimmerman

SVP, Head of Global Medical
dzimmerman@rgare.com

About This Survey

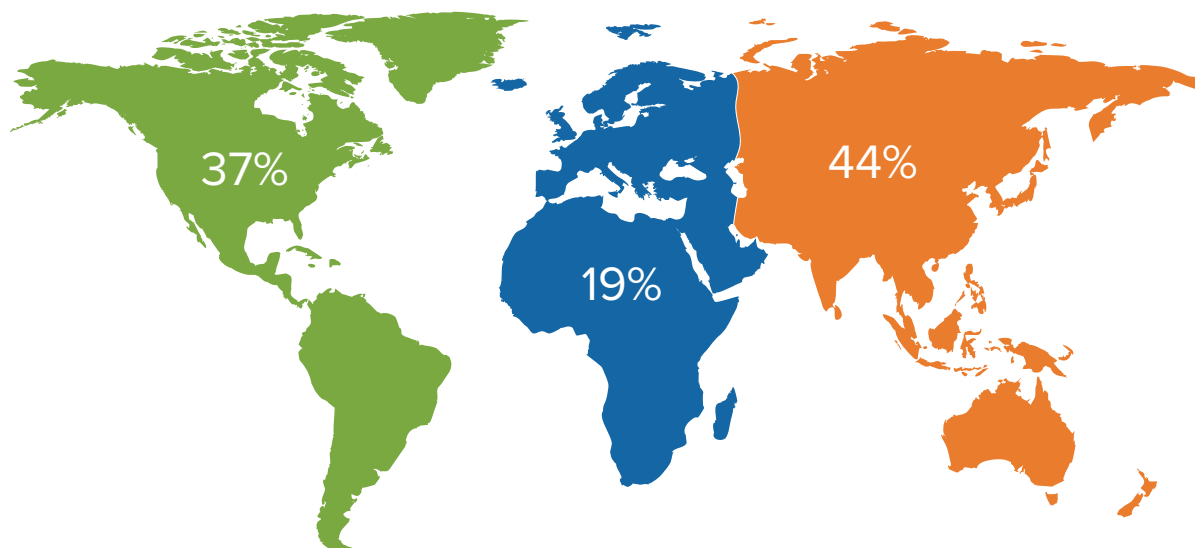
RGA's Global Survey on the Evolving Roles of the Insurance Medical Director provided insights and will enable life and health insurers to focus on their medical director needs and development areas to provide the relevant leadership and capabilities needed to support future industry strategy and business objectives.

Survey findings explore the barriers or challenges of the medical director role as well as any perceived future insurance landscape disruption owing to artificial intelligence (AI) and emerging disease trends.

RGA conducted the survey online from April through June 2021 globally. The survey responses were requested from medical directors working for life and health insurers (and in some cases multiple insurers). A total of 124 insurance medical directors from 84 companies participated globally with the following regional representation:

- **Asia Pacific (APAC)** region 44% (55 Respondents)
- **Europe, Middle East, and Africa (EMEA)** region 19% (23 Respondents)
- **Americas** (U.S., Canada, and Latin America*) 37% (42 Respondents)

*A small number of respondents from Latin America (4 Respondents)



RGA would like to thank all of the respondents once again for participating in this survey. Based on this initial study, RGA may conduct this survey again in the future to continue to track industry trends. The survey was anonymous so we will only release where the respondents are located in **Appendix A**.

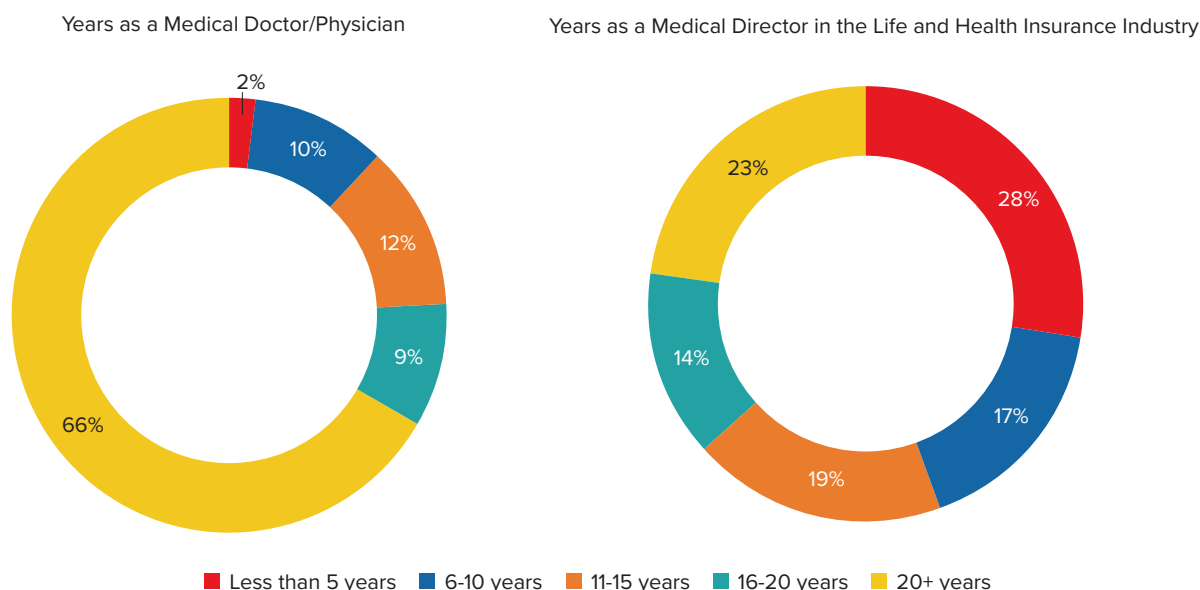
Key Survey Findings

The results from this survey of 124 insurance medical directors, representing 84 companies, and the first of its kind globally, are summarized below:

- Respondents are an experienced group of medical directors with 88% active in the medical profession for 10 years or more
- 55% of participants have been in the life and health insurance industry for 10 years or more
- Plans for retirement in the next 5 years are in place for 18% of respondents
- Almost two-thirds (64%) are employed as full-time medical directors
- 87 respondents (70%) dedicate the majority of their time to technical medical expertise - underwriting and claims case review; product development; training; guideline development; research and development; industry presentations; and regulatory inputs
- 50% of Global and 36% of Asia-Pacific-based insurance medical directors were more involved in product development overall; conversely, 45% of medical directors in the Americas were not part of the product design process
- In the last two years, 53% reported that their role and influence has increased especially during the pandemic
- 60% reported a shift in underwriting with an emphasis on more competitive decisions, e-underwriting, and data analytics
- For claims practices, 35% reported a shift to more decisions being challenged and increasing complexity of claims and products
- Limited or lack of access to information was reported as the greatest global challenge for insurance medical directors followed by increasing automation
- Automation or AI has impacted the insurance medical director role for 23% in the last 5 years
- Only 50% of respondents reported a high or moderate level of investment from employers for training and development with their companies
- 43% survey respondents are interested in a change of role (highest concentration in those with less than 15 years of experience in the insurance industry)
- The largest area of development where medical directors see future growth includes data and analytics skills (50%) as well as communication and negotiation skills (33%)

Medical Experience and Qualifications

Our global survey respondents are an experienced group of medical directors with 88% active in the medical profession for 10 years or more, and 55% of participants have been in the life and health insurance industry for 10 years or more.

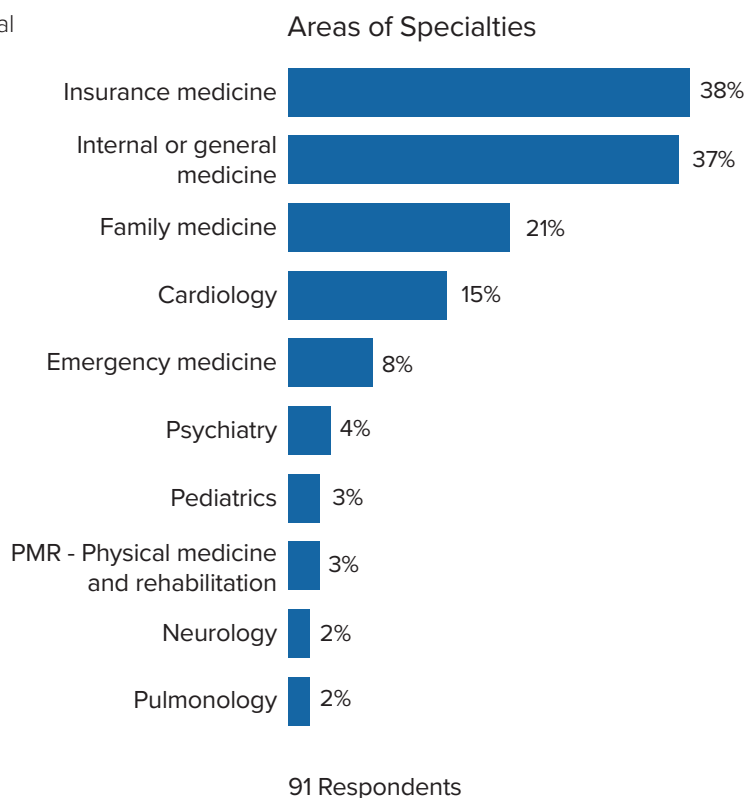


A large proportion of insurers require their medical directors to maintain an active license, as reported by 65% of global respondents.

When asked whether participants currently practice medicine as a clinician or in another capacity, 32% answered they are active outside of their insurance medicine role.

Fifty-one percent of participants spend the majority of their time or efforts dedicated to their insurance medicine role. Interestingly, 15% reported working in other areas including clinical or laboratory research; however, with a lower proportion of time spent in this role.

Generalist or specialty board certifications are maintained by 91% of survey respondents. The highest concentration of participants reported certifications in insurance medicine (38%), internal or general medicine (37%), followed by family medicine (21%), and cardiology (15%).



Scope of Roles and Titles

The scope of roles and geographies varies for insurance medical directors. Fourteen participants (11%) indicated having a global role.

Insurance medicine job titles also varied by regions. Respondents were able to choose multiple titles which are dependent on location as well as if they are employed by multiple insurance companies as a consultant or part-time employee. The most common title held by 27% of participants was Medical Director, followed by Chief Medical Officer (25%), and Consultant (19%). One-fifth of survey respondents are Consultants and may work for multiple insurance companies or practice medicine privately.



India (29)
Japan (8)
South Korea (8)
South East Asia (5)
Hong Kong (4)
Australia (1)

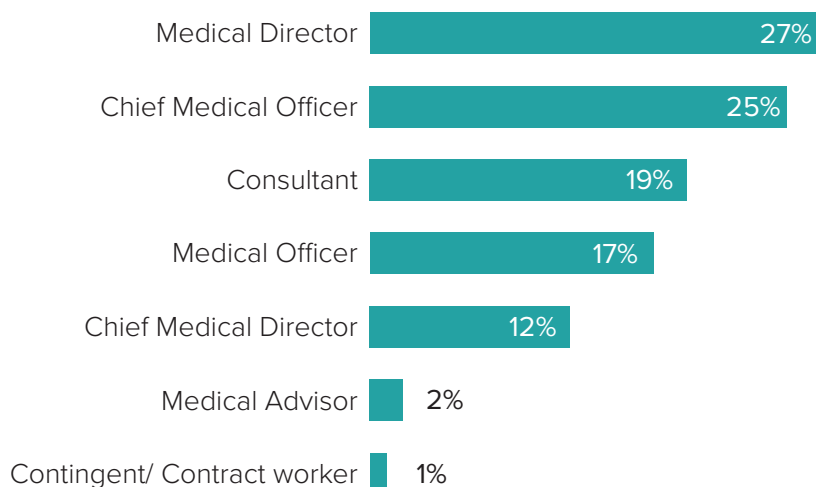


United States (25)
Canada (17)
Mexico (3)
Brazil (1)



France (7)
South Africa (7)
United Kingdom (4)
Spain (2)
UAE/Egypt (2)
Italy (1)

Insurance Medicine Job Titles



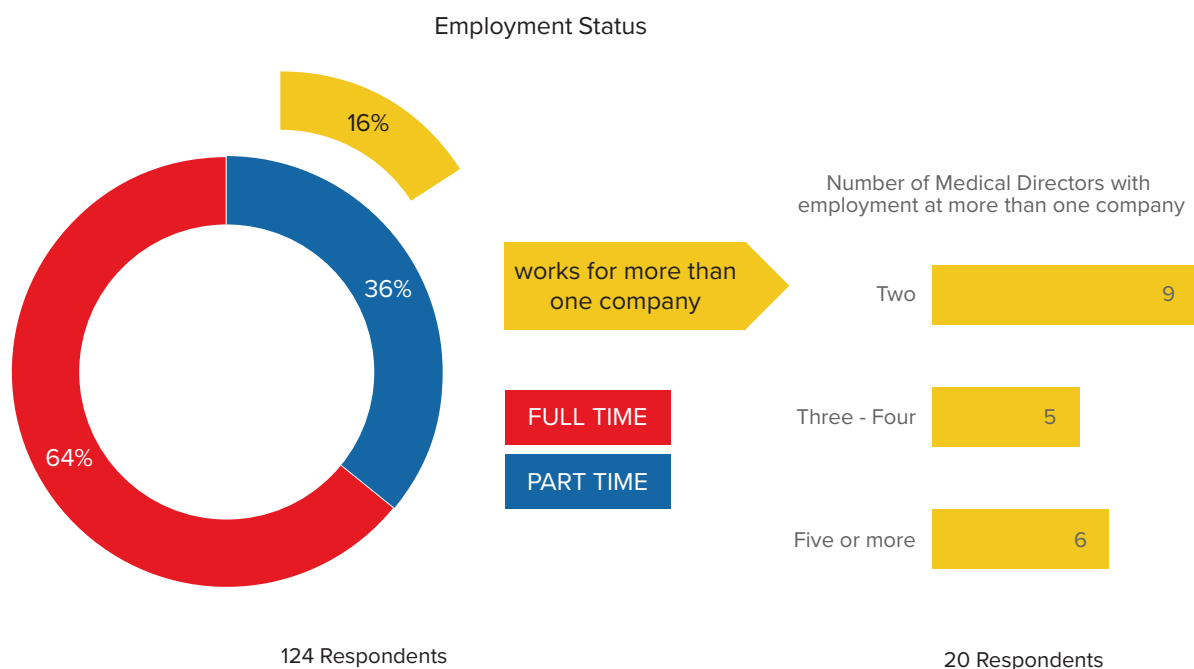
124 Respondents

Multiple responses provided for different markets

Employment Status and Retirement Plans

Sixty-four percent of medical directors reported they are currently employed full-time. Half (50%) of the respondents with global roles reported part-time status, while 41% of respondents from the EMEA region and Americas reported working on a part-time basis.

Sixteen percent of physicians working on a part-time basis reported being employed by more than one company. The majority of these were employed with between two and four companies, while a few medical directors consult up to five companies.



In the next five years, 18% of all respondents reported plans to retire, with a higher rate of retirements noted for Americas (35%) and the EMEA region (18%).

Roles and Responsibilities

Currently 63% of insurance medical directors report to the Chief Medical Officer (43%) or Chief Underwriter (20%). Smaller percentages of respondents report directly to Head of Claims (14%) and Chief Operating Officer (14%), as well as other varied titles.

Regarding areas of engagement in the insurance medical director role, the majority of participants (70%) spend their time conducting technical medical expert reviews of underwriting and claims cases. Under this category medical directors are also involved in product development, training, guideline development, research and development, as well as industry presentations and regulatory inputs.

Other areas of engagement included: managerial roles, operational roles (e.g., policy servicing and customer service), and marketing where insurance medical directors are tasked with visiting clients and supporting client engagement. Less than 20% of their total time is dedicated to these areas.

With respect to the main areas of oversight for medical directors, there is a high level of support for the following areas:

- Underwriting – 80%
- Claims – 44%
- Internal training – 31%
- Manual development – 20%

Moderate support in the role is dedicated to seminar speaking engagements (27%), product development (25%), and operations (23%). The least support or oversight is allotted to benefit/cost studies, insurance industry leadership, and client engagement with almost 50%.

Main Areas of Oversight or Support

High level Moderate level Low level None/Not applicable

Underwriting



Claims



Internal training



Manual guidelines development



Seminar/speaking engagements



Operations



Insurance industry leadership e.g., ICLAM, CLIMOA, AAIM



Thought leadership (including articles and published materials)



Product development



Client engagement and support



Benefit/cost studies



N=124

Medical Briefings and Communications

Medical directors are often involved in researching and composing medical briefings or communications to support their company's executive leadership team or company board of directors. During the ongoing SARS-CoV-2 pandemic, there has been an increased need for briefings to support internal strategy and client support on the topic by insurance medical directors. Forty-eight percent of medical directors were involved in medical issue briefings prior to the pandemic and that number increased to 63% during the pandemic. Medical directors with a global scope of role had the most oversight for briefings, according to our survey findings.

Changing Role and Influence

Three-quarters (73%) of the medical directors surveyed indicated that their role largely remained the same in the last two years, while 27% noted a shift from a medical role to a more non-medical role which may have entailed more strategic, operational, or managerial roles.

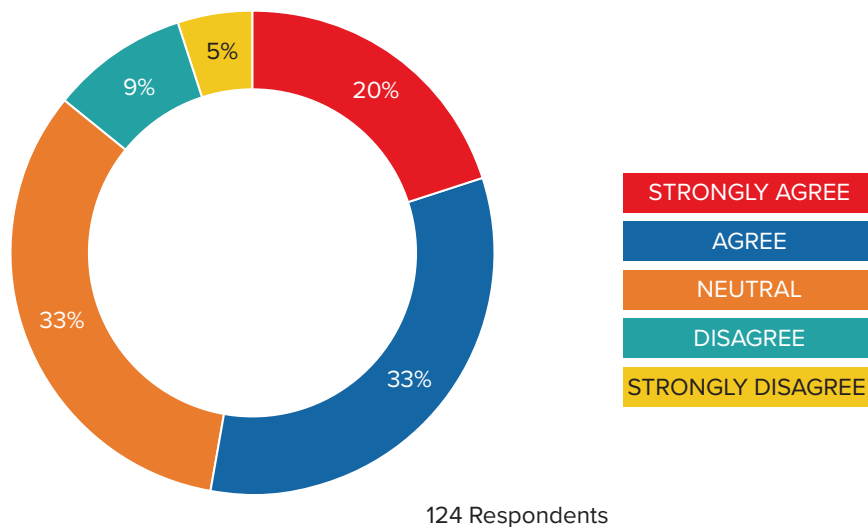
When we examined the data by role and geographic scope of the role, a maximum shift was found in medical directors in global roles with 43%. These medical directors may be more responsible for business and leadership roles within their companies.

These roles remained medically-related, but shifted to the following areas:

Insurtech <ul style="list-style-type: none">▪ Automated underwriting - elaboration of rules and flows▪ Data driven underwriting models, AI▪ Digital health data▪ Integration of wellness	Risk Management <ul style="list-style-type: none">▪ Product development▪ Medicolegal consultations▪ Training and development▪ Claims and underwriting audit	Business and Leadership Roles <ul style="list-style-type: none">▪ Medical research and innovation▪ COVID pandemic impact▪ Business strategy development and implementation
--	---	---

Fifty-three percent of all respondents indicated that they believe that their role and influence has increased in the last two years. It is quite possible that the role of the medical director has never been more highly valued than now due to the ongoing COVID-19 pandemic. The role is viewed as the undoubted expert and evidence-based voice of science at the leadership table of insurance companies. Medical directors are now actively consulted for their advice in making critical company decisions.

Change in Role and Influence



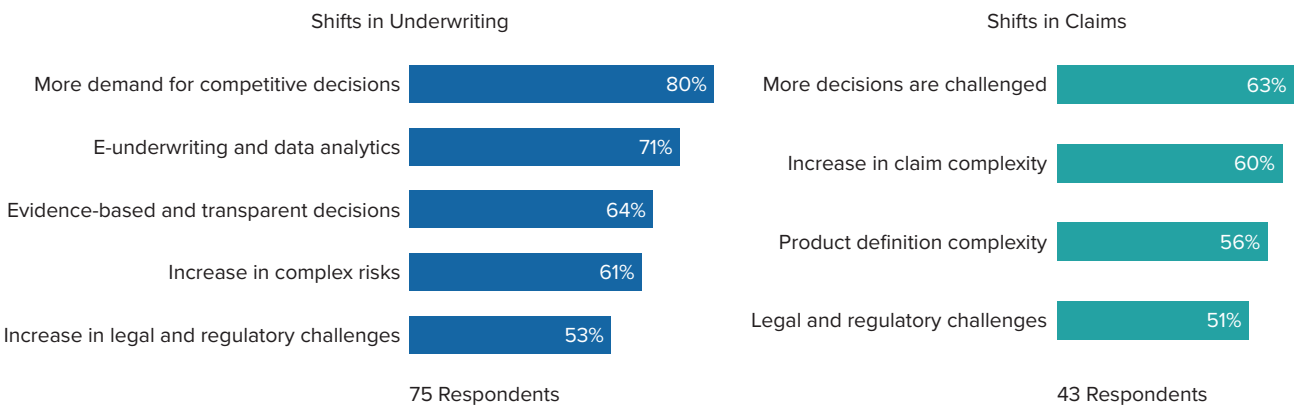
Shift in Underwriting and Claims Philosophies

More than half of the surveyed medical directors (60%) have observed a major shift in the philosophy or best practices in underwriting in the last few years, with an increased demand for competitive decisions by 80%, while 71% reported an increase in e-underwriting and data analytics. Other changes included a major shift regarding evidence-based and transparent decisions (64%) and increasingly complex risks indicated by 61%, as well as legal and regulatory challenges (53%).

Claims practices have been impacted for 35% of respondents, particularly around more claims decisions being challenged (63%), increased claims complexity (60%), and product definition complexity (56%). Half of the participants indicated legal and regulatory changes as a factor in shifting claims practices in the last three years.

Shift in Underwriting and Claims Philosophies

60% reported a shift in underwriting and 35% reported a shift in claims practices

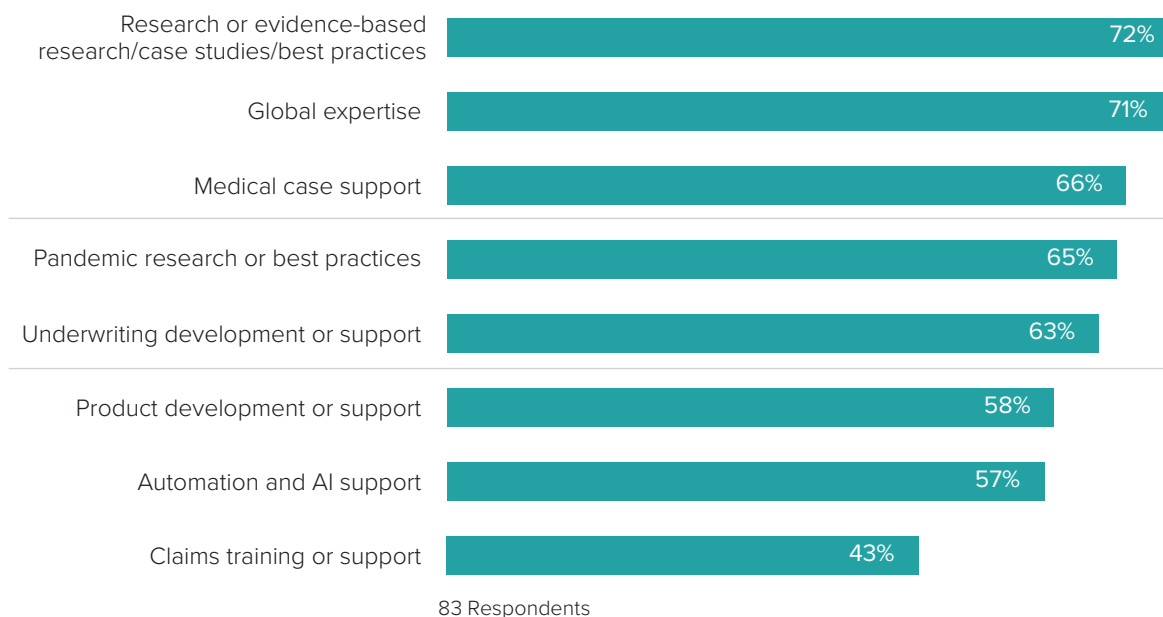


Adapting to Change

An increased reliance on reinsurer medical departments in the future is foreseen by 67% of medical directors to support their business. In particular, 72% see an increased reliance on research or evidence-based research, including case studies and best practices. Similarly, 71% expect to draw upon the global expertise of reinsurers.

Other future areas of support included: medical cases (66%), pandemic research or best practices (65%), underwriting development (63%). Lower prioritized areas are product development (58%), automation or AI (57%), and claims training (43%).

Future Reinsurer Support for Medical Departments and Resources

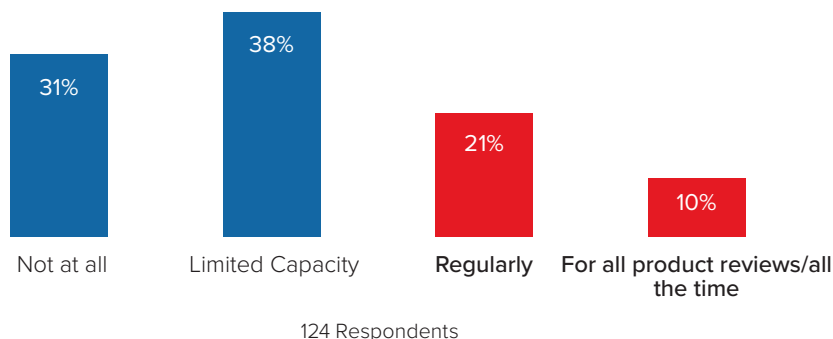


Disease and Product Trends in Insurance

Product Design and Review

Globally, 31% of medical directors reported involvement in product design or reviewing product language on a regular basis. RGA noted that 50% of Global and 36% of Asia-Pacific-based insurance medical directors were more involved in product development overall; while 45% of medical directors in the Americas were not part of the product design process.

This is an area of potential growth opportunity where medical directors could offer their expertise and guidance.



Increasing Impact of Diseases in Life and Health Insurance

The disease categories with increasingly greater impact in the life and health insurance industry are cardiovascular disease, diabetes, and cancer. Surprisingly, mental health and respiratory diseases were ranked lower by participants despite the COVID-19 pandemic.

The following table breaks down the weighted rankings by geography of roles for responding medical directors.

	GLOBAL	EMEA	AMERICAS	APAC	ALL RESPONDENTS
Cardiovascular disease	28%	24%	28%	29%	28%
Diabetes	28%	18%	17%	32%	25%
Cancer	17%	26%	27%	23%	24%
Mental health	16%	27%	15%	6%	13%
Respiratory diseases	6%		3%	6%	4%
Neurodegenerative diseases	4%	1%	4%	1%	2%
Auto-immune diseases	2%	4%	3%		2%

124 Respondents

Top Ranked Growth Products for Life and Health Insurers

Given ongoing medical advances, respondents ranked critical illness and life products, followed by long term care (LTC), as the top ranked products for growth opportunities. Medical reimbursement and hospitalization products are a higher priority for the APAC region.

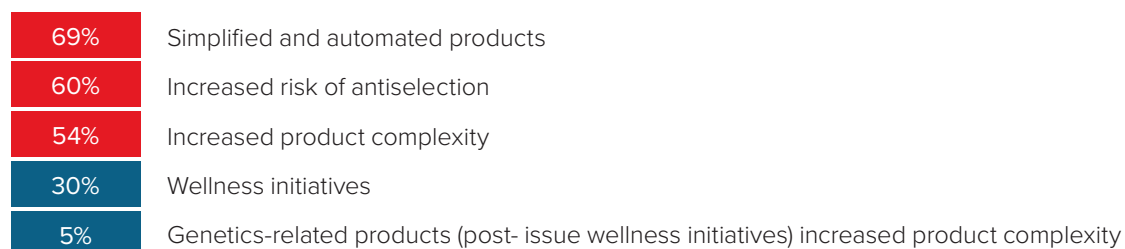
The following table breaks down the weighted rankings by geography of roles for responding medical directors.

	GLOBAL	EMEA	AMERICAS	APAC	ALL RESPONDENTS
Critical illness	20%	30%	18%	26%	23%
Life	22%	18%	30%	23%	24%
Long-Term Care (LTC)	22%	23%	20%	10%	17%
Disability / Total Permanent Disability (TPD)	18%	18%	21%	7%	14%
Medical reimbursement (in-patient and out-patient)	13%	8%	7%	17%	12%
Hospitalization / Hospital cash	5%	3%	3%	14%	8%

124 Respondents

General Trends Impacting Life and Health Products

In the last three years the general trends impacting life and health products are:



124 Respondents

Challenges

Limited or lack of access to information and automation were ranked as the top challenges faced by medical directors in their roles today. Despite insurers having an increasing amount of data to work with, many medical directors reported a key challenge was access to data to perform their roles. The influence of competition and business drivers, as well as operational or system drivers, were identified as secondary challenges. Meanwhile, training and technical knowledge (or limited skill sets) were less common concerns but may reflect investment on behalf of insurers in their medical staff.

The following table breaks down the weighted rankings for responding medical directors.

Limited or lack of access to information or data

20%

Automation

16%

Influence of competition and business drivers

16%

Operational or system challenges

15%

Skill set limitations - need more training or more technical knowledge for current or emerging role

13%

Shifting focus to non-medical aspects

10%

Heavy workload – lack of work/life balance

9%

Impact of Automation

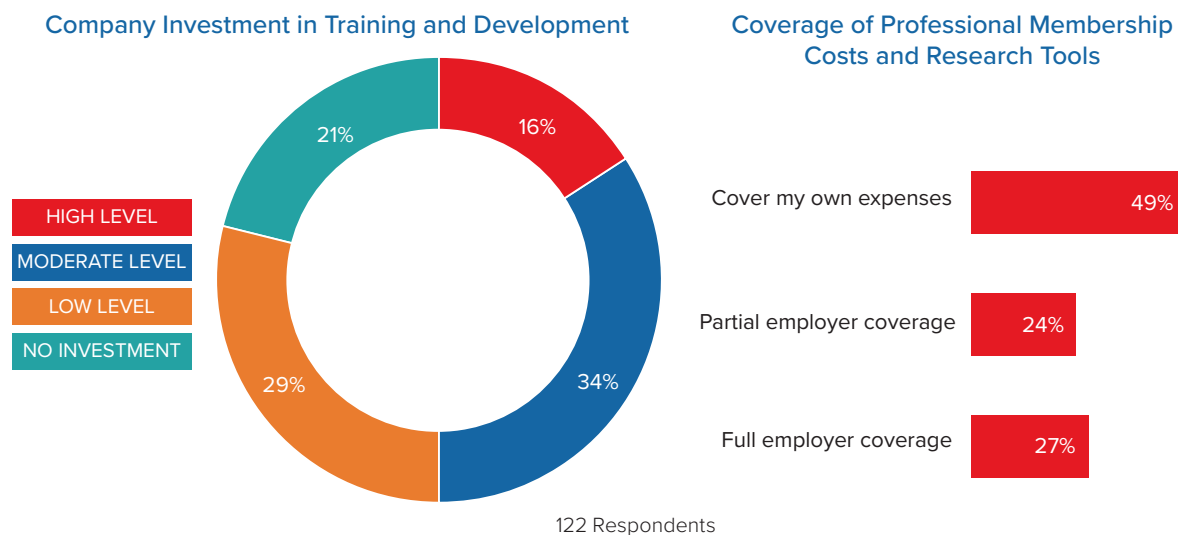
Automation or artificial intelligence (AI) has impacted the medical director role for 23% of respondents in the last five years. Evolving areas of automation where no medical involvement is needed included:

- Rules-based engines
- Straight-through-processing (STP) of simple and complex cases
- Outsourcing underwriting and claims
- Predictive modelling/ risk analytic models
- Dynamic risk calculators

Future Opportunities

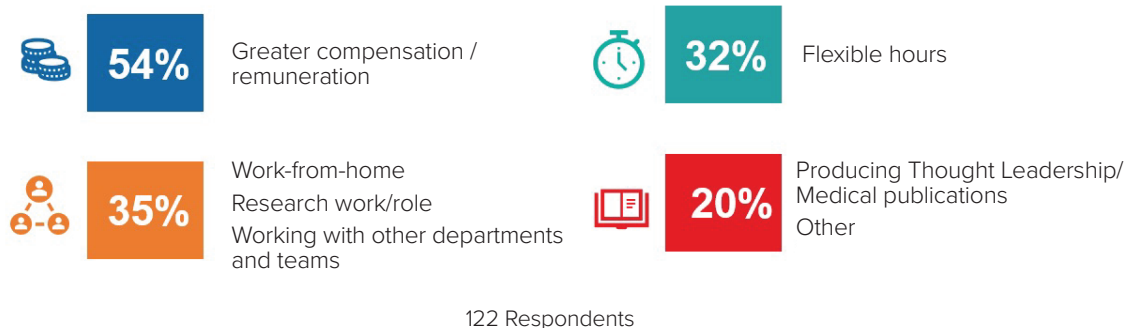
Half (50%) of the respondents described their company's investment in training and development for medical staff as high or moderate. Training and development examples would include covering or compensating employees for continuing medical education credits to keep them current in their field of expertise. As expected, full-time physicians are more likely to receive more training and development investment, with 57% of these respondents reporting high or moderate investment.

Despite the above findings, 49% reported that they cover their own costs for professional memberships and research tools (e.g., journal subscriptions and licenses to conduct research). Approximately one-quarter reported partial employer coverage for these expenses, and 27% enjoy full coverage.



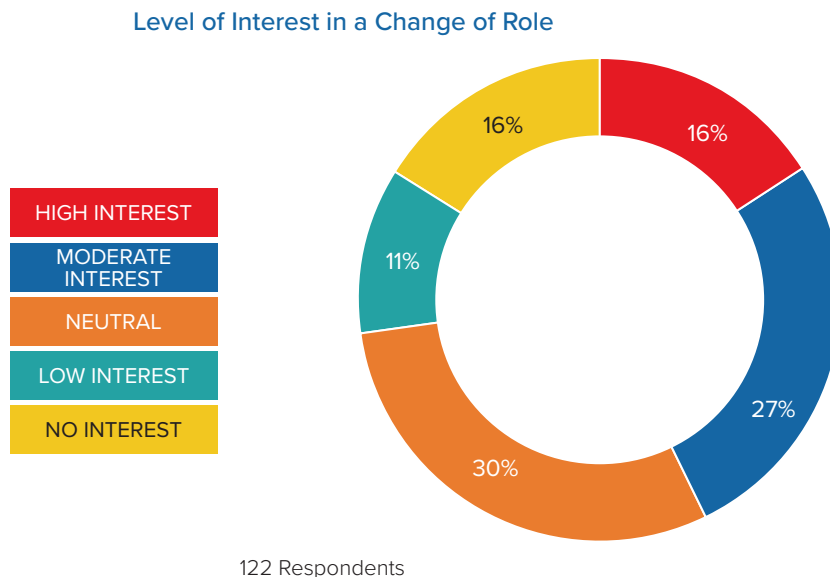
Factors to Increase Attractiveness of the Current Role

Survey participants indicated that the factors that would make their current role more attractive are increased compensation or remuneration, followed by flexibility to work-from-home, increasing their research work or role, and working with other departments and teams. A smaller percentage (20%) reported producing thought leadership or other medical publications as an area to make their role more interesting.



Interest in a Change of Role

Medical directors reported that a change of role is of current interest to 43% of respondents.



Medical directors with less than 15 years' experience in the insurance industry were most interested in a change of role. Based on geography, survey findings indicate that physicians in EMEA and APAC are most interested in a new role.

New Skills for Development

Survey respondents indicated which areas were of the most interest when developing their technical and business skills. For technical skills, 50% said specializing in new areas of insurance medicine (such as genetics) is a priority. Similarly, 50% rated data and analytical skills as being the area they want to develop. Communication and negotiation skills are also valued as growth areas for medical directors, as their roles expand into more managerial roles and/or working with other departments and teams internally or externally.

All groups with varied years of experience are interested in advanced degrees or courses as well as becoming proficient in data and analytics.

Technical Skills



Business Skills



122 Respondents

Future Role of the Medical Director

Eighty-eight percent participants surveyed believe that the future role of the medical director in the life and health insurance industry is promising, with more scope and more challenges as new products are emerging in markets globally. Risk awareness is increasing, new diseases and pandemics are increasing, both of which require massive information, experience, and expertise of the part of the medical director.

Highlights from the open-ended responses are summarized below:

- Traditional role will involve more medical complexity and less information
- More involvement in AI-based automation
- Product innovation, training and data analytics will be dominant
- Need to adapt and learn more skills
- Need to be more integrated with business to remain relevant
- Shift to a more strategic and planning role
- Current evolving environment, particularly post COVID-era is an opportunity

What medical directors are saying about the future role...

“It's a growing role and the significance of the role is being recognized by the industry. However, the role is also transitioning from traditional claims management towards a more technological and multi-faceted role.

“The Medical Director has a great role in the future for:

1. Raising and executing - digital transformation of medical knowledge to help create AI to help easy and corrective approach for decision making
2. Continuing medical education for all the medical doctors so that insurance medicine is a practice
3. Developing products which fits all and is easy to buy.

“Our core value is to provide accurate mortality and morbidity risk assessment. Whether we do that with “traditional underwriting” or through advising on the development, implementation, and maintenance of a predictive model, our input is essential. We also add value to the company by assisting business units outside of underwriting, especially legal/regulatory, marketing, and actuarial.

“Digital transformation will continue to change the landscape of insurance. Medical directors should see the opportunity in this challenge to help shape strategy and to add value to the industry.

“From managing risk, the future will include shaping strategy, product development, and data and statistical analysis.

Conclusion

Insurance medical directors have a unique role to play in the insurance industry and are instrumental in bridging medical science with the insurance business. In addition to providing valuable medical input, the role is also evolving into some strategic and operational responsibilities. Forty-three percent of survey respondents are interested in a change of role (the highest concentration in those with less than 15 years of experience in the insurance industry).

The largest area of development where medical directors see future growth includes data and analytics skills (50%) as well as communication and negotiation skills (33%). Respondents reported that the role could be made more attractive by increasing compensation (remuneration) for 54% of participants, followed by work-from-home arrangements, greater collaboration with other internal teams, and an increased research/work role. Insurers could also ensure better retention of doctors if they offered more investment in training and development of their medical directors. Despite increasing automation and AI, the medical director role is still important for complex medical, underwriting, and claims review. The future of the medical director role will include more strategic responsibilities, product development expertise, as well as data and analytics analysis to support insurer needs.

Appendix A

RGA would like to thank all of the respondents once again for participating in this survey. The survey was anonymous so we will only release where the respondents are located here:

44% | APAC

Australia	1
Hong Kong	4
India	29
Japan	8
South Korea	8
Malaysia	2
Philippines	1
Thailand	1
Taiwan	1

19% | EMEA

Egypt	1
France	7
Italy	1
Spain	2
South Africa	7
United Kingdom	4
United Arab Emirates	1

37% | AMERICAS

Canada	17
United States	25
Mexico	3

About RGA

Reinsurance Group of America, Incorporated (NYSE: RGA). RGA is one of the largest global providers of life reinsurance and the only global reinsurance company focused solely on life and health reinsurance. With headquarters in St. Louis, Missouri, and operations around the world, RGA delivers expert solutions in individual life reinsurance, living benefits reinsurance, group reinsurance, health reinsurance, financial reinsurance, facultative underwriting, and product development.

Disclaimer

This detailed, confidential summary of the survey results is being provided to each company that participated in the survey. At a later time, the survey results may be presented in a more public forum.

This report is for information purposes only. The information contained herein is not exhaustive and does not cover all the issues, topics, or facts that may be relevant to this subject.

All participating companies have agreed that the results gained from this survey will be used for internal purposes only, and will not be used in marketing, sales materials, or part of any sales activities.

RGA Reinsurance Group of America, Incorporated assumes no responsibility for the accuracy of data submitted by participating companies, nor for any action or results arising from use of the survey and reserves the right to publish high-level overviews and analyses of any key survey result findings.

© 2021, Reinsurance Group of America, Incorporated. All rights reserved. No part of this publication may be reproduced in any form without the prior permission of the publisher. For requests to reproduce in part or entirely, please contact: publications@rgare.com

RGA has made all reasonable efforts to ensure that the information provided in this publication is accurate at the time of inclusion and accepts no liability for any inaccuracies or omissions. None of the information or opinions contained in this publication should be construed as constituting medical advice. Nothing contained herein shall be construed as an admission of reinsurance claims liability by RGA.