

Global Innovation Awards 2025 - Finalist

Submission Category: Life | Health | Retirement

1. LOGISTICS

Submission Title	MedScreen+: A Pioneering Al-Driven Solution Strengthens Digital Underwriting
Company Name	RGA
Impact: What is the scope of the problem being solved, whether for	Life insurance underwriting began in the late 17th century, with the first known policy written in 1688. For over 300 years, the process has remained largely the same: stacks of paperwork, lengthy questionnaires, and reliance on self-disclosed information.
your employees, customers, industry, or society?	Yet of course customers have changed—they're more health-conscious, undergo regular checkups, and generate vast amounts of digital health data. Society is different too, embracing technology that enables innovation while adding layers of complexity to traditional underwriting.
	That's why MedScreen+ is revolutionary—the first solution in the market to transform life underwriting by leveraging health data and medical reports and moving beyond outdated questionnaires. By integrating cutting-edge technology, RGA is making underwriting faster, more accurate, and simpler than ever before—finally bridging the gap between centuries-old practices and the modern era.
	RGA's groundbreaking MedScreen+ technology solution, adaptable to any market, was strategically deployed in Asia to address a critical need in the region's insurance industry. By leveraging AI -powered tools, RGA tackled the unique challenges of managing voluminous, non-standardized health records and the shortage of human underwriters in a rapidly growing market, demonstrating the platform's potential to enhance digital underwriting processes globally.
	When selecting the optimal market for MedScreen+'s debut, Hong Kong stood out due to its distinctive position as a global financial center. The market offers insurers exceptional access to domestic and cross-border business in the region; in 2023, the life and health insurance industry in Hong Kong experienced significant growth with a staggering HK\$59 billion spent on insurance policies (see footnote 1).
	Amid this tremendous market opportunity, a key problem stands

in the way of further growth: a significant lack of human underwriters. The number of insurance professionals has not kept pace with the insurance needs of a rapidly growing middle class in China and across Asia. Digital underwriting products can help fill the gap; Al and optical character recognition (OCR) are essential technology for making this possible.

These tools also address another key challenge faced by insurers in any market: Underwriters struggling to manage voluminous health records that are not maintained in a standard format.

Annual health checks are popular in many Asian countries. In China, for example, health checks are central to the government's national policy for health literacy. According to a report in The Lancet, in 2020 alone, Chinese hospitals and physician offices hosted 431 million health checks, equivalent to two-thirds of urban residents over the age of 15. These health checks can provide a wealth of data, but most health records are paper-based or hand-written. The format of these records and the types of information they include also varies greatly.

To launch the next generation of underwriting solutions, RGA collaborated with Prudential Hong Kong Limited to launch MedScreen+.

As a market-first innovation, MedScreen+ seamlessly integrates AI technology, OCR, and RGA's proprietary Aura Next digital underwriting engine to transform the underwriting landscape. The solution allow insurers to electronically capture disparate paper-based records and standardize relevant information for extraction and assessment. When integrated into an automated underwriting platform such as RGA's Aura Next the technology underwriting platform such as RGA s Aura Next, the technology can help fill the insurance talent gap by reducing the number of decisions that must be made by human underwriters.

Here's how it works: Frontline agents upload an applicant's health checkup to the MedScreen+ user interface, which digitizes the report using AI and OCR and coverts complex text and images from the reports into structured data. The solution is RGA proprietary and is designed to handle variations in health checkup reports and test results.

RGA's automated digital underwriting engine Aura Next then assesses the structured data and provides an indication of underwriting outcomes. Depending on the severity of the health status, the indicative results will determine eligibility for a simplified issue application, full application with additional medical requirements, or a possible decline.

MedScreen+ redefines the underwriting process, making it faster, more accurate, and significantly more customer friendly. By leveraging health data and deep underwriting knowledge, MedScreen+ ensures decisions are consistent, especially for complex applications with health-check reports.

<u>Footnote 1</u>: https://www.scmp.com/business/banking-finance/article/3252469/mainland-chinese-customers-spent-us76-billion-hong-kong-insurance-policies-last-year-sales-fall-pent

Creativity:

How does this innovation stand apart from alternatives in the marketplace?

While AI has become a buzzword in the insurance industry, with many insurers eager to incorporate it into their business processes, RGA has developed a first-in-market solution that practically and effectively integrates OCR and AI to drive real improvements in underwriting across Asia and around the world.

MedScreen+ stands apart from alternatives in the marketplace through its innovative approach, comprehensive capabilities, and tangible results. RGA's development of MedScreen+ followed a rigorous, multidisciplinary approach. The project began by bringing together expert underwriters,

medical professionals, and digital solution specialists to form the backbone of the development team. This diverse group applied design thinking principles to deeply analyze customer pain points and industry challenges, ensuring the solution addressed real-world needs. The team then defined extensive business and user requirements, developing underwriting rules and philosophy tailored to the Asian market. Rigorous data governance ensured the handling and transmission of customer health data met privacy protection standards. To ensure reliability and effectiveness, they conducted thorough quality assurance and user acceptance testing. The process didn't end at launch; RGA implemented ongoing monitoring and audit functions to identify areas for continuous enhancement, demonstrating their commitment to long-term improvement and adaptation.

MedScreen+ distinguishes itself through several key features that set it apart in the marketplace. It enables comprehensive test assessment, processing data from over 160 types of lab tests, including blood tests, ultrasounds, ECGs, and CT scans, providing a holistic health assessment. The system provides indicative underwriting outcomes based on RGA's philosophy, powered by AURA Next automated underwriting engines. Importantly, all models and rule sets are built in-house by RGA, ensuring tailored solutions for each applicable market. To enhance usability, MedScreen+ features dual user interfaces for both underwriters and agents, streamlining the process for all stakeholders.

The tangible results and impact of MedScreen+ demonstrate its effectiveness in improving underwriting efficiency and accuracy. During the product launch, the solution enabled underwriters to process applications 30-50% faster, significantly reducing turnaround time. It also reduced underwriters' workload, with approximately 8% of applications with eligible medical reports now fully automated, allowing underwriters to focus on more complex cases. Automation ensures consistent underwriting decisions, minimizing errors and discrepancies. For agents, MedScreen+ provides clear, predictable underwriting outcomes, empowering them to sell confidently. The system has also decreased agent inquiries related to Simplified Chinese medical reports by more than 50%, simplifying the sales process and improving overall efficiency.

The impact of MedScreen+ on underwriting processes is also illustrated through the experiences of those who use it daily. Underwriters have enthusiastically embraced the solution, with one stating, "MedScreen+ has truly transformed my daily work as an underwriter." This sentiment is echoed by others who now find working without it "unimaginable." The solution's efficiency is demonstrated in real-world scenarios, such as a case where an underwriter encountered nine abnormal test items. Thanks to MedScreen+, only three of these items required manual review, significantly streamlining the process. Moreover, the system's advanced capabilities extend to complex cases that would typically necessitate external expertise. As one underwriter shared, "I recently had a case with an uncommon ultrasound description that would typically require a third party ultrasound description that would typically require a third-party medical opinion. But thanks to MedScreen+, it analyzed the text and provided valuable suggestions right away."

Scalability:

How can others, whether inside or outside the insurance industry, leverage this innovation to enhance its impact?

Looking forward, MedScreen+ will continue to expand to meet the market's needs of incorporating multiple medical evidenceand wider range of health checkup reports. The solution's success in processing Simplified Chinese medical reports showcases its potential for adaptation to other languages and markets where health checkups and reports are prevalent. RGA is already working to develop the tool in English.

MedScreen+ is designed with flexibility in mind for integration with different insurers' existing underwriting systems and workflows:

- API Integration: The solution can be easily integrated into an insurer's existing sales and underwriting platforms via API, ensuring a smooth adoption process.
- Cloud-Based Solution: All of MedScreen+'s solutions are cloud-based, which facilitates easier integration for clients.
- Output Customization: Clients have the flexibility to customize how the output from MedScreen+ is integrated into their own underwriting engines. This allows them to align the results with their specific processes without changing the underlying model.

MedScreen+ has a wide range of possible applications. It processes reports with unstructured data into structured health information, which can aid in decision-making across various areas of insurance and healthcare. For example, during the claims process, insurance professionals could use MedScreen+ to quickly assess medical reports and identify diagnosis and treatment information. For that particular use, RGA would develop claims decision rules, which differ from underwriting rules.

Additional information:

- Diagram: Technology Foundation of MedScreen+: https://bit.ly/44rpgqC
- 2. Media coverage:
- "Prudential HK partners with RGA for faster digital underwriting," Reinsurance Business, October 2024
- "Prudential and RGA launch "first-in-market insurtech solutions" MedScreen+" Reinsurance News, October 2024
- "Prudential launches insurtech solutions MedScreen+", Insurance Asia, October 2024
- 3. Legal disclaimer for this award submission: This submission is for general informational purposes only. Part of the information has been made for illustrative purposes and may not materialize. The opinions expressed and conclusions reached do not represent any official position or opinion of the Reinsurance Group of America, Incorporated (RGA). RGA makes no representation or warranty to the accuracy of the information. This submission shall not be copied or shared, in whole or in part, without the express prior written consent of RGA.