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Wearable Wellness: Five Quick Takeaways from RGA's Fitness Tracker Study

By Chris Falkous

Using wearable fitness tech to develop insurance wellness programs has been the subject of an industry-wide discussion for years. And as the technology improves, the conversation grows. At RGA, we wanted to gather meaningful data and gain experience over theory in our understanding of insurance wellness initiatives.

In 2016, RGA conducted an anonymous study among its employees and their friends and family to explore wearable fitness trackers' potential application for insurance product development. The study included around 1,000 participants from 23 countries and was conducted over 12 weeks using five tracking devices.

Key insights for insurers included these five takeaways:

ACCURACY REMAINS AN ISSUE

Not all devices are created equal. For improved plan performance, insurers should consider mandating high-quality trackers, retrieving data from multiple devices, or limiting member benefits based on the quality of the device, particularly for those plans in which higher activity levels trigger additional benefits.

Key findings:

- Between the study's two main devices—both wrist-based—steps recorded on one were, on average, around 8 percent higher than those recorded by the other.
- Anecdotally, one participant recorded approximately 19,000 steps on his smartphone while simultaneously recording approximately 13,000 steps on a wrist-based device.
- Manufactured steps—via swinging an arm, for example—were identifiable as they occurred at activity levels not normally seen and at times of day when activity did not normally occur. This suggests that fraudulent individuals will need to be quite sophisticated if they want to hide their "cheating."
- Notably, a rather surprising result was that fraudulent steps, such as swinging an arm, sometimes raised heart rate to a level above that which would have been expected, so was this cheating at all? Significant further work is required to generate an accurate and robust solution for identifying fraudulent activity, but the initial signs are promising.

Questions the industry should be asking:

- How can insurers easily evaluate the accuracy and reliability of wearable devices?
- How should insurers translate these differences to ensure fairness among customers?
- How do insurers build a multi-device, multi-location solution?
- How can insurers identify and limit fraudulent activity?

STYLE AND COMFORT COUNT

Although it is important to evaluate and approve devices based on accuracy and reliability, insurers should also consider allowing participants as much choice as possible in what they wear. The more choices among approved devices, the better the user engagement and persistency.

Key findings:

- Attractiveness, unobtrusiveness, and ease of setup were listed as the most desirable features in a device.
- Reliability mattered as well; one device produced an unacceptable failure rate of 5-10 percent.
- Many participants also found it uncomfortable to sleep wearing their devices.

Key questions to consider moving forward:

- What is the human real estate wearables will eventually claim?
- With the proliferation and wide variety of wearable tech devices, how can insurers both allow for consumer choice and confirm device accuracy?
- Some of the latest devices do address style and comfort concerns. When will these devices be more affordable and widely available?

PRIVACY IS A PRIORITY

The increasing popularity of wearables is undeniable, yet many choose to remain non-users, mainly due to lack of interest or privacy concerns. Insurers need to factor this in as they develop wellness plans.

Key findings:

- Our survey of non-participants, which received hundreds of responses, provided insight into reasons why employees chose not to participate in the study. The figure below shows the results of this survey:

Reason for Not Participating	Results
Not interested in wearables	28%
Privacy concerns	25%
Not enough incentives	13%
Missed the deadline	13%
Misunderstood the criteria	9%
Own device not supported	6%
Other	6%

These results elicited two clear questions:

- How can insurers generate interest among those apathetic toward wearable tech?
- What can be done to allay privacy concerns?

DEMOGRAPHICS BRING DIFFERENCES

When designing wellness plans, it is important for insurers to identify demographic differentiators and consider support and incentives to appeal to each.

Key findings:

- When analyzing participation by region, we found very little variation in participation as the study progressed.
- On the contrary, participation levels by age did show significant differences. The over-50 age group had the highest participation level and the under-30 group the lowest.

Demographic questions to consider:

- To which target markets should wellness plans be tailored?
- What works in one region for one demographic is unlikely to be directly transferrable to other regions and other demographics. How can insurers best adjust programs accordingly?

DATA IS THE DRIVER

The wearables study was RGA's first step at gaining experience over theory and provides a starting platform from which we can advise our clients and launch deeper, more interesting work. We have initiated a program of gathering more hard data to support meaningful conclusions in the wellness space and are now working on additional pilot projects and seeking partners with more sophisticated metrics and modelling frameworks.

Much remains to be investigated before wearable wellness initiatives can fully progress from promising explorations to practical, long-term solutions. Continued real-world studies to collect and analyze real data must drive that process.

To read a more robust version of this article, please view the report on RGA's Knowledge Center. To learn more about RGA's wearables study and to view additional results and analysis, contact RGA. ■

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