PUBLIC RISK

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A WEARABLE TREND FOR INSURANCE

By Jose Tribuzio

"What's that on your wrist?"—Around your neck or on your hip? These days, it seems as if everyone's wearing one. Of course, we're talking about wearable devices—gadgets accompanied by various apps—which by all estimates are anticipated to have far-reaching implications for risk and insurance management.

Public risk managers should keep an eye on this exciting, new area of technology, as these devices could potentially change the way we investigate accidents, prevent claims and minimize risk in the future. In this article, we take a look at some of the ways this emerging area of technology is being explored for the benefit of insurance programs.

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WHAT ARE WEARABLES?

Wearables are essentially computer-powered devices that can comfortably be worn by consumers, and are capable of collecting, storing and transmitting valuable data points.

It's difficult to pinpoint just when and where this trend began, but in the modern sense of the term, the first wearable was introduced in 2006 when Nike and Apple teamed up on the Nike+iPod Sport Kit. The Sport Kit used sensors in Nike shoes to track and transmit performance measures—such as distance, average speed, and calories burned—to Apple products. Sport Kit and other fitness trackers, such as Fitbit and Misfit, have become popular accessories for runners, athletes and fitness enthusiasts for several years now.

BROADENING APPLICATIONS

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Wearables could then be used to transmit a snapshot of health and fitness information to physicians, emergency response teams, hospitals and personal trainers. In fact, Apple is already making plans for such a scenario, extending its strategy beyond Apple Watch to include HealthKit, a centralized hub that will allow other devices and apps to share data in interesting ways. Apple has also partnered with the Mayo Clinic and leading health record company, Epic Systems, in the hopes of one day making this data available to doctors.

Technology giants like Samsung, Google and Microsoft have also entered the wearables market, investing significant research dollars and creating their own data hubs—such as SAMI, Google Fit and Microsoft Health, respectively.

WEARABLE DATA SERVICES

Data services may arise around wearable information troves, such as medical consultation, fitness coaching and weight-loss training. Software companies may strive to automate insights—beyond just motivating a user to take more steps to reach a daily goal—and cloud-based software could consolidate various wearable data, making it available for deeper analysis. Here are some current to near-market scenarios to consider:

- Physicians are already beginning to see some impact with wearable data delivering insights into chronic conditions, such as high blood pressure. Patients commonly bring cell phones or printouts of blood pressure readings to share with their doctors, who can then see if the condition is under control or if patients require modifications to their medication.
- In the future, smart shirts may evolve to use sensors to track heart rate and respiration rate, alerting doctors if patients are about to have a heart attack or stroke.
- In a recent survey, Towers Watson and the National Business Group on Health found that 76 percent of employers surveyed were exploring the use of personalized digital health technologies, including mobile health applications, wearables and social media to encourage greater physical activity among employees. It's anticipated that a focus on becoming healthier will enable employers to realize gains in productivity, as well as lower healthcare costs.
- As a growing number of employers adopt work-site wellness programs that use and consolidate wearable data across employee and group health populations, information could one day illustrate an improved picture of risk, providing insights for underwriting and potentially leading to lower premiums.

SMART EYEWEAR

When we consider the inclusion of smart eyewear, like Google Glass, there is an even greater potential for innovation. Although Google Glass development was temporarily put on hold, it is anticipated to re-launch any day now. Through its initial Explorer Program, Google Glass app development began and beta versions were made available at the hefty cost of $1,500 per Glass. Some applications in development included the following:

- Field claims professionals are traditionally equipped with a laptop, digital camera and voice recorder. Insurance companies are now beta testing Google Glass to capture myriad loss information required for personal and commercial lines. For example, Google Glass can take pictures, record audio and video, and instantaneously upload files to a claims system. This new scenario eliminates the need for a field adjuster to juggle multiple devices, as all these functions are consolidated on Google Glass. At the same time, adjusters will be enabled to have better interactions with customers, enhancing service levels.
- One firefighter in North Carolina's Rocky Mount fire department developed a Google Glass app to assist in firefighting and life-saving activities. For instance, the Glass product can display incoming emergency dispatch calls, map where fires and other emergencies are occurring, and locate nearby fire hydrants. Using verbal commands, firefighters can call up building floor plans, as they're about to enter a burning building, and access vehicle extraction diagrams to help free accident victims trapped inside a damaged car.
- DriveSafe has developed an app to alert drivers when their eyes begin to close. It's still being fine-tuned, but it could significantly benefit drivers who may be on the road for long shifts of 12 hours or more a day. There's been lots of interest from insurance companies, as well as software and hardware developers for the transportation industry.

COMBINING EMERGING TECHNOLOGIES

It's anticipated that wearable devices also could be used along with other emerging technologies. For instance, Robert Wilson, president of WorkersCompensation.com, anticipates wearables could be enabled with Radio Frequency Identification (RFID), providing accident investigators with additional information.

With this type of integrated technology, an investigation might reveal that an employee was running when he slipped and fell, or an employee who claimed to have strained his back on the loading dock was actually sitting idle in the break room at the alleged time of injury. Wilson anticipates that biometric sensors could be cross-referenced for other vital statistics, such as the worker's level of stress, to provide a broader picture of an accident than ever before.

WEARABLE GROWTH & CONCERNS

If wearable technology offers a healthier and more productive workforce, adoption will continue to rise. By 2018, the wearable market could reach 130 million units sold with a market value of $6 billion, according to market researcher IDC. In the meantime, key concerns must also be addressed, including:

- **Privacy.** The Health Insurance Portability and Accountability (HIPAA), which protects patient data and medical records, does not yet apply to data from wearable devices. The Privacy Act of 1974 also protects against invasion of personal information. As the volume of wearable data grows and applications expand, the industry will need to be mindful of privacy concerns.
- **BYOD Policies.** Similar to cell phones, employers will have to consider including wearables in their Bring-Your-Own-Device (BYOD) policies to address issues, such as security for the device data, as well as preservation and collection of electronically stored information, if a legal or regulatory request is issued.
- **Abandonment.** A recent poll by PricewaterhouseCoopers found that one-third of users who bought wearable devices abandoned them after six to 12 months. A key to ensuring ongoing use is to create a user experience and perception of ongoing value and benefits.

THE FUTURE OF WEARABLES

Applications for wearable devices are still in the early phases of development. Many uses are yet to be discovered, especially as we consider the ways it can be integrated with other technologies. At the very least, public risk managers should monitor these devices and their applications, as the growing number of benefits may eventually lead to adoption within their own organizations.

As popularity of wearables continues to grow, companies may need to incorporate new policies regarding security of these devices, and privacy will also need to be considered. In addition, business intelligence and data analysis will need to advance in order to process and provide relevant, real-world insights across newly available statistics. In the end, these devices have the potential to impact employee health, wellness, productivity, and insurance costs—as well as improve claims investigation and loss experience. ■

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