Self-diagnosis – Does the Consumer Have the Advantage Over the Insurer?

The purchase of any type of insurance is based on the premise that the applicant/proposed insured will disclose any and all pertinent information related to insurability and that the insurer will act upon that information in good faith. If information is withheld, the balance of the transaction is altered.

Today, potential insureds have access to a wealth of information related to their health using websites, smart-phone apps, and tests for various conditions and diseases via home diagnostic products (HDPs), which are readily available from various sources. The information gleaned from these sources and test results is not typically documented anywhere, least of all in a physician's file, and typically, will remain unknown to the insurer. Without disclosure of this information the mortality/morbidity classification cannot be ascertained and the premium charged may not be commensurate with the potential risk being assumed. On a larger scale, this information imbalance could affect the future pricing or availability of insurance for all consumers.

Do-it-yourself diagnosis

A do-it-yourself diagnosis is becoming easier than ever as more HDPs appear. The ability to self-test/diagnose appeals to many, and tests for an array of conditions including lipid levels, blood pressure, potential cancers, impaired glucose, or a sexually transmitted disease like HIV, are available, easy to utilize and may require no more than a urine sample or a drop of blood from a finger-prick.

Do-it-yourself testing is a multi-billion dollar business globally, and, according to estimates, expanding at approximately 20 percent a year. Prices can vary from as little as $8, to as much as $175, depending upon the type of testing being performed. Cholesterol testing may cost as little as $20, while HIV testing may cost $40. Hepatitis C testing can be done for around $60 with results made available in a matter of days.

Self-testing related to neurological and psychological/psychiatric conditions is available on-line for everything from dementia and depression, to schizophrenia and anxiety disorders.

It should be noted that approximately 60 percent of people who use the internet have viewed health information online, with over half specifically attempting to self-diagnose. Individuals attempting to self-diagnose tend to be younger, with higher levels of education, and household income in excess of $75,000. The term 'cyberchondria' has been coined for this behavior.

Is it all good news for the consumer?

Self-diagnosis and home testing can be dangerous for the individual involved. The testing may be administered incorrectly, leading to suspect results. Certain tests may lack sensitivity and specificity, be unlicensed or unapproved by governing bodies, or make claims that are unsubstantiated. In many instances results are difficult to interpret and may provide an incorrect diagnosis. Inaccuracies may only heighten the potential insured's concern leading to a perceived need for insurance without disclosure of the suspected impairment.

And how could this impact the insurer?

What is the potential impact for an insurer? Let's use HIV testing as an example. If the proposed insured has knowledge related to his or her HIV status and fails to disclose this at the time of application, but the insurer's testing protocol requires HIV testing, then the infection will become evident. However, in the current environment, there is pressure to reduce the need for medical evidence, including HIV testing. If HIV screening were reduced, effective screening for HIV positive applicants will be diminished with the result being a potential for increased anti-selection.

The same possible result exists relative to online tests for various neurological and psychiatric disorders, especially for living benefits products. For example, where severe depression or dementia is indicated by an undisclosed test, there could be significant consequences for the claims experience of a disability or long-term care benefit.

Direct-to-consumer genetic testing

Direct-to-consumer genetic testing is also a cause for concern, particularly as the cost and time involved in this form of testing continue to drop. Full sequencing of an individual's genome now costs less than $1,000, while the cost of a test for specific mutations is much lower. Because it provides information related to the risk of developing many common and possibly fatal disorders, genetic testing may provide a potential insured with critical knowledge unavailable to an insurer. Therefore, it is crucial that this information be disclosed in compliance with legal and regulatory requirements.

Genetic testing is a fast evolving discipline and legislation in many jurisdictions is unable to keep pace. The necessary review and approval processes may lag behind the commercial release of a new test. The Food and Drug Administration (FDA) is responsible for approving medical products and testing. It has disallowed private genetic test providers from selling various products in recent years, citing concern that the tests may not be sufficiently validated for use in deriving clear and unequivocal diagnoses. The FDA also expressed concerns that in some instances a consumer may receive a worrying medical diagnosis, typically via e-mail, without the often essential explanation and support of qualified medical professionals.

Given the fact that genetic testing continues to progress, and is becoming more affordable and more commonly used in clinical medicine, we should expect to see genetic test results more frequently included in medical records. Barring any statutory or regulatory restriction, insurers should be able to use that information to assess and classify risk appropriately.

An inevitable trend requiring continued surveillance

Home diagnostic testing is here. Consumers are better informed and more health conscious than ever before. What are the consequences for the insurance industry if applicants are equipped with personal health information that is not disclosed?

We expect self-testing to become more common. It remains to be seen whether the balance of knowledge between insurers and proposed insureds will be threatened, but the trend deserves attention. As an industry we must defend our right to have full access to all relevant information necessary to assess risk, be it family history, medical records that include genetic test results or self-test results. Of course, this information needs to be treated responsibly and ethically, but it is essential to maintaining mortality and morbidity objectives and offering appropriately priced coverage to all potential insureds.

As an industry, we must:

- Monitor advances in medical technology and all forms of testing
- Take an active role in initiatives that help develop appropriate ethical and legal frameworks for all forms of direct-to-consumer testing
- Defend the legitimate right to access all relevant medical information, regardless of the source, to maintain our ability to assess risk appropriately for all potential insureds
- Constantly assess current underwriting selection criteria to avoid potential weaknesses and possible anti-selection.

Reece Hodgson
Risk Management Consultant
Munich Re, Canada (Life)

Gary Haddow
Senior Underwriting Consultant
Munich Re, US (Life)