

Brave New World: The Impact of Technology on Underwriting

A 75 year-old male, non-smoker applied for life insurance for estate liquidity. He had a history of high blood pressure and elevated cholesterol, both well controlled with medication. The balance of his medical history was unremarkable for significant health problems. His insurance exam and resting EKG were normal. Unfortunately, his blood study was abnormal, and he was declined coverage. The abnormal finding was a new blood test that the carrier was using on applicants 65 and older. The test indicated the applicant had early heart failure.

“Did you know about this test?” the applicant asked the agent? The agent hadn’t heard of the test. Now what?

A 53 year-old female, non-smoker applied for both life and disability insurance to protect her family. Her medical history suggested she was a preferred risk, and her insurance exam, resting EKG, and lab tests were normal.

Unfortunately, she was declined for both life and disability insurance due to

“undisclosed medical history.” She was shocked and upset at this decision and insisted that the carrier provide her with an explanation for the declination.

She found out that the carrier used a pharmacy surveillance system to retrieve and assess all the prescriptions she had filled in the last five years. One of the medications in her “health credit report” was a drug normally prescribed for depression. This was the undisclosed medical history that the carrier cited as the basis for their declination.

“Did you know about this surveillance system?” the applicant asked the agent. The agent hadn’t heard of the surveillance system. Now What?

Welcome to the brave new world of underwriting where technology is rewriting the book on how applicants are screened for insurability. While determining insurability has always been the “table stakes” of our business, insurance companies are using technology to raise the stakes even higher. As these two cases make perfectly clear, agents can ill afford to ignore these unprecedented changes that impact underwriting outcomes as well as their relationships with their clients. Clients expect agents to know what carriers are testing for or surveying, and they expect them to have a “game plan” to solve these underwriting setbacks.

This is what we will be discussing today. We are going to look at a new generation of medical tests and surveillance programs that carriers are using or considering using to determine insurability. We are going to review what they are, why they are being used, and how they are impacting applicants, agents, and underwriting outcomes.

In addition, we are going to outline a four-step game plan for agents to manage underwriting setbacks. The goal of the game plan is to preserve relationships in the face of “bad underwriting news” while at the same time do everything possible to “salvage” the applicant’s insurability.

It Looked Good on the Drawing Board

Let’s be clear; life insurance carriers are in business to make money. To do that, they are always looking for underwriting tools and strategies that help them arrive at accurate pricing decisions. Technology offers them two powerful resources to accomplish these goals:

1. Biomedical blood and urine tests
2. Database surveillance systems

Advances in medical technology have led to a new generation of blood and urine tests that life insurers are understandably eager to implement. Some of

these biomedical tests are diagnostic (i.e. they diagnose medical conditions such as hepatitis C), but most of them are non-diagnostic and serve as “indicators” of underlying health problems when the tests are abnormal (i.e. elevated cholesterol, elevated liver enzymes, etc.).

Advances in database technology have led to a new generation of consumer surveillance systems that data mine and monitor a wide range of behaviors and transactions including financial and health histories. Carriers are eager to utilize this new capability to crosscheck what applicants report on their applications, medical exams, and consumer reports.

But what sounds reasonable in theory from the carrier’s perspective can have very different consequences for applicants and agents. Consider the PSA story.

The PSA Story

Fifteen years ago most agents had never heard of the PSA (prostate-specific antigen) test. Today agents know PSA is used by the life insurance industry to screen male applicants, usually fifty and over, for the “possibility” of underlying prostate cancer. The operative word here is “possibility.” While the PSA was initially heralded by the medical community as a breakthrough blood test to identify, treat, and reduce the mortality of prostate cancer, questions remain about its role as a screening test. Despite these uncertainties, it has become a

mainstay of life insurance underwriting. But what has been the impact of PSA testing on carriers, applicants and agents?

First and foremost, the PSA test has proven to be a cost-effective screening test for carriers. It has screened away applicants with prostate cancer who might otherwise been issued a policy. Although not its original intention, PSA testing of life insurance applicants has saved lives. That is all good news. But the bad news is that PSA testing has also created a new burden for applicants and agents. Here's why.

Since PSA was introduced in the life insurance industry, thousands of men have been sent back to their doctors for follow-up visits, repeat PSA tests, referrals to urologists, and work ups for prostate cancer that included prostate biopsies. Did the majority of the applicants "sent back" due to an abnormal PSA finding have prostate cancer? No. They had prostatitis (inflammation of the prostate) or BPH (benign enlargement of the prostate). Of those applicants who were found to have prostate cancer, did the discovery improve their quality of life or mortality? The short answer is probably "no" on quality of life and "maybe" on the improved mortality.

The PSA story is emblematic of the burden that applicants and agents have to endure with the advent of a new screening protocol. In the case of PSA, applicants have to absorb the cost and emotional distress involved with sorting

out what the abnormal test really means. Do they have a terrible disease or not? Agents, in turn, have to scramble to comfort and support their clients while they look for ways to orchestrate an underwriting “work around.” Navigating this type of underwriting setback is stressful enough with a biomedical test that has been approved by the medical community for screening. But what happens if the new test that was never intended to be a screening test? Consider the CEA story.

The CEA story

While all agents know about the PSA testing, very few of them have even heard of the CEA test. The carcinoembryonic antigen (CEA) test is blood study that measures a substance, which is normally found only during fetal development, but may reappear in adults who develop certain types of cancer. It is ordered by doctors for patients with known cancers most commonly in the gastrointestinal system.

According to the medical community, CEA is not a good screening test. It is too non-specific (i.e. abnormal test results can be caused by other, non-cancerous medical problems). This gives the CEA test a “low diagnostic value” (i.e. the test produces excessive “false positives”). In addition, when the CEA is abnormal due a malignancy, the cancer is typically advanced and the outcome unchanged

by the discovery. But despite this poor profile, some carriers are using the CEA as a screening test for life insurance applicants. Why?

The short answer is the cost-benefit ratio. If the cost of the CEA test is low enough relative to the anticipated savings from identifying and not insuring applicants with undetected, advanced cancer, then the test is fair game for life insurance screening. For the carriers, that's good news.

The bad news is that being declined for life insurance based on an abnormal CEA test creates an ominous burden for the applicant. Proving you don't have advanced cancer can be expensive and emotionally distressing. Complicating the situation is the reality that a significant percent of the CEA-rejected applicants will go through a medical workup only to find out they had a false positive (i.e. no cancer).

What's Next?

PSA and CEA tests are harbingers of the future of biomedical screening of life insurance applicants. New tests are being introduced or are on the way. Two tests of immediate interest to applicants and agents are BNP and A1c.

The 75 year-old male discussed at the beginning of this presentation was declined based on an abnormal BNP. So what is BNP and why are carriers using it to screen applicants?

BNP stands for “brain natriuretic peptide,” which is a hormone made by the heart and measured with a blood test. The medical community uses BNP to diagnose and treat heart failure. It is of special interest to life insurance companies for three reasons:

1. The incidence of undiagnosed heart failure increases in older applicants.
2. BNP identifies “subclinical heart failure” (i.e. applicants who have no symptoms and don’t suspect they have early heart failure such as our 75 year-old client).
3. BNP may prove to be a low cost alternative to exercise treadmill testing.

Carriers are starting to add BNP to their blood panel primarily for older clients (i.e. age 60 and up). This is how the 75 year-old male wound up being declined. In his case, his BNP reading indicated early heart failure. The client reviewed the findings with his doctors who ordered additional testing. The additional tests confirmed early heart failure. The applicant was indeed uninsurable.

The next blood test of importance to agents is the A1c (also known as glycated hemoglobin or HbA1c). It reflects the average daily blood glucose for the last 2-3 months. Doctors use the A1c to monitor and manage diabetics.

Carriers use the A1c as a “reflex test” if the random blood sugar or fructosamine is elevated. Their goal is to screen out “undiscovered diabetics,” a strategy that has proven very effective. Now the carriers are considering upping the ante on A1c screening to include all applicants. Why? There are three primary reasons:

1. An aging insurance population in the United States, which means an increase in the incidence of diabetes.
2. An obesity epidemic in the United States, which means an increase in the incidence of diabetes.
3. An estimated 54 million individuals in the United States aged 21 years and older who are “prediabetics” (i.e. impaired fasting blood glucose levels between 100mg/dL and 125mg/dL), which carries the risk of increased mortality.

So what happens if all life insurance applicants are screened with A1c? The immediate effect will be a significant increase in the volume of applicants who are postponed, rated, or declined for coverage. For most of these applicants, the adverse underwriting decision will come as a surprise. In most cases, prediabetes and diabetes is a silent disease. This new finding will require the

applicant to go back to their doctor for additional testing. Are they officially a diabetic and what treatment do they need? While the “true” diabetics might be grateful for the discovery, the prediabetics as well as their physicians may take exception to being screened, coded, and subsequently charged more for life insurance. All in all, applicants and their agents will be left to sort out the real meaning of an abnormal A1c test.

The New Surveillance

In addition to biomedical testing, the life insurance industry is also deploying new surveillance systems to mine applicant data for underwriting information. This is what happened to the 53 year-old female who was declined due to “undisclosed medical history.” Her omission was discovered through a pharmacy surveillance system.

Pharmacy surveillance systems like those provided by Intelliscript and MedPoint mine the databases of pharmacy benefit management (PBM) firms. PBMs are third party administrators of prescription drug programs who are responsible for processing and paying prescription drug claims. PBMs have the pharmacy records of more than 210 million Americans.

Through agreements that allow them to access PBM databases, Intelliscript and MedPoint are able to provide carriers with reports on applicants that include the

date each prescription was filled, the number of refills, and the prescribing physician for the last five years. The information is reported using various reporting strategies to highlight the underwriting implications of the medication history. The carrier uses this information to crosscheck the information provided by the applicant. And pharmacy surveillance is only the beginning.

Already there are plans to expand the inventory of surveillance resources to include lab data, pathology reports, and test results (i.e. CT scans, MRIs, etc.). As electronic medical records become more sophisticated, the ability to gather, aggregate, analyze, and profile medical information will continue to shape and change how carriers underwrite applicants.

Now What?

In light of the profound changes that biomedical testing and database surveillance systems are having on underwriting, agents need to have an effective game plan to manage setbacks. Here's how.

1. **Find out the real story** It is not enough for agents to know products, case design, and tax law; they also need to be fluent in how carriers are screening applicants for insurability. The best way to do this is to ask carriers what tests and surveillance systems they are using. Agents should have this information for each carrier with which they place

business. They also need carriers to provide this information in non-technical, easy to understand language so it can be used with their clients. Lastly, agents need to make sure that carriers notify them of new tests or surveillance programs “before” they are put into effect.

2. **Tell clients the real story** Hoping for the best is not a risk management strategy; it is a disaster in slow motion. Agents need to develop a succinct, easy to understand presentation to educate clients about the brave new world of underwriting. Clients need to know what is being screened for and why. Underwriting transparency is no longer optional.

3. **Know the risks upfront** Agents need to know the underwriting landscape as early as possible. One the most effective tools for preempting bad outcomes is effective field underwriting. This is relatively easy to do by concentrating on the “big five” screening questions. This simple yet effective survey can identify 90% of potential underwriting problems. Here are the “big five:

a. **What medications are you currently taking?**

i. Don't worry about the correct spelling. Just the get the list.

This one step alone will help determine the pricing expectations of the case.

b. Do you have any heart issues?

- i. This is an open-ended question that covers everything from high blood pressure, heart murmurs, angioplasty, and bypass surgery. The goal of the question is simply to find out if there is anything to “worry about” from an underwriting perspective. If there is, the details can be developed either formally or informally.

c. Do you have any cancer issues?

- i. This is an open-ended question that covers everything from skin cancer to lung cancer. The goal of the question is simply to find out if there is anything to “worry about” from an underwriting perspective. If there is, the details can be developed either formally or informally.

d. Do you have any diabetic issues?

- i. This is an open-ended question that covers everything from “borderline” to long-standing diabetes. The goal of the question is simply to find out if there is anything to “worry about” from an underwriting perspective. If there is, the details can be developed either formally or informally.

e. Anything else that might be an underwriting problem?

- i. This is an open-ended question that covers everything from speeding tickets, foreign travel, DUIs, sleep apnea, and bankruptcies. The goal of the question is simply to find out

if there is anything to “worry about” from an underwriting perspective. If there is, the details can be developed either formally or informally.

4. **Be prepared** When underwriting trouble arrives, clients expect agents to step up and manage the setback. One essential management tool is a “transfer letter” that the client completes and signs to have the adverse underwriting information sent to his or her physician. The companion tool to the “transfer letter” is the “we need your help letter” that is sent to client’s physician. Physicians need to know that there is an underwriting issue that is complicating or preventing their patient from getting a policy and that there help is essential to clarify and potentially resolve the issue.

A similar strategy applies to “surveillance” setbacks. Agents need to have a transfer letter that the client completes and signs to have the details of the adverse information released to the client. Surveillance setbacks can open a political Pandora’s box and may require the services of an attorney to sort out. The sooner you provide the client with the adverse information the better.

Final Thoughts

It is clear from our discussion, that the brave new world of underwriting is complex and not without controversy. Advances in biomedical testing and database surveillance allow carriers powerful new resources to determine insurability. However, these same resources also create new and unpleasant burdens for applicants and agents. Agents need to help applicants understand the scope and purpose of these new screening tools before they begin the formal underwriting process. New tests and surveillance systems require a new underwriting transparency.

Agents also need to be fully versed in what carriers for testing for and what surveillance systems are being employed to investigate applicants. "I didn't know," is not an appropriate answer. Agents are paid to know all aspects of the life insurance process. New tests and surveillance systems require a new level of agent expertise in field underwriting.

Failure by agents to prepare for the predictable underwriting setbacks created by these new underwriting resources will adversely impact their client relationships and results.