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Session 23PD Underwriting Evolution

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Summary: This panel shows how underwriters can use technology to obtain low-cost/high-value underwriting information and dramatically improve underwriter productivity. This panel also describes screening tests now becoming available, including the outlook for genetic testing, and discusses how to modify current underwriting standards for growing international markets.

Mr. James D. Atkins: Daniel Burrus, the keynote speaker, said that we must prepare our companies for the future, not the past. I think that is exactly what we are here to do. We want to find out how profitable companies will underwrite next year and in the years that follow by seeing how things actually happening today will shape the near future.

Let me introduce the panel. Dr. Marta Kushnir, vice president and medical director of CIGNA Reinsurance, is responsible for medical underwriting, research, and development for all lines of business including life, health, and disability. She also oversees new product development and underwriting support. Dr. Kushnir has

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lived and worked in France and Mexico and travels extensively both in her job and for pleasure. Next, Dr. Richard Braun, medical director and chief knowledge engineer for Lincoln National Risk Management, Inc., is responsible for the systems content of Lincoln National's risk management knowledge base underwriting and claims system. Dr. Braun serves on the American Council of Life Insurance (ACLI) genetic issues committee and the mortality and morbidity liaison committee directing intercompany medical impairment studies.

You will learn how new emerging underwriting methods and technologies can help your company better classify risk and reduce expenses. We will review some of the new tests being developed and rolled out now, as well as underwriting systems and international underwriting, and we will conclude with questions from you.

UNDERWRITING TESTS

Dr. Marta Kushnir: I am going to talk about the benefits and the drawbacks of laboratory testing. We will look at tests for HIV/AIDS, hepatitis, tuberculosis, and other diseases.

HIV/AIDS

HIV/AIDS testing has been available in the U.S. for many years. The types of tests available are blood testing, dry blood spot testing, and saliva testing. Urine testing was done for a while and it was found to be sensitive and specific, but it was never approved by the Food and Drug Administration (FDA).

We know that AIDS testing has saved us a great deal of money in claims. Ten years ago the insurance industry feared that by now it would be slaughtered by catastrophic AIDS claims. Fortunately, claims have not been that high. Studies have shown that the people that we insure are people at low risk for contracting AIDS.

Right now AIDS claims are relatively low as the older homosexuals, the hemophiliacs and the Haitian immigrants have basically died. We may, however, see a blip up due to younger gays who are not practicing safe sex and because of the HIV strains involved. The E-strain of HIV, endemic to the U.S., is mostly transmitted through homosexual contact. The B-strain commonly seen in the Pacific Rim in Asia, is the one that is mostly acquired through heterosexual contact. So the Centers for Disease Control (CDC) is concerned that servicemen and -women and people traveling through all parts of the world may spread the B-strain to North America.

The major issues with HIV/AIDS have been very well documented and legislated. Each state has its own set of rules for informing and counseling people. AIDS

testing limits, however, are a great concern as agents and brokers eager to sell insurance hound their companies to relax the requirement for any kind of blood testing.

Global trend predictions are very different than the U.S. trend predictions. In the U.S., the incidence and prevalence of AIDS is still limited to the major urban centers such as New York City, Miami, San Francisco, and Chicago. It really has not spread to the great degree that it was thought it would spread as the plague of the 20th century. Global data, however, are much different, so I will touch on that when I talk about the emerging market.

HEPATITIS

Hepatitis C has a 50% chance of proceeding on to cirrhosis and hepatocellular carcinoma. If you do have a positive antigen for hepatitis C, your risk for early mortality is very high. However, the prevalence of hepatitis C is not that great at this point. I believe that will change with the influx of more immigrants from the Pacific Rim, as well as eastern Europe.

Hepatitis screening is difficult to do, and it is not done routinely on any type of insurance testing. Even if your medical director asks for a hepatitis panel, the hepatitis B screen is not done as a reflex, and that is probably not going to change. Also, hepatitis C has a rather lengthy, 90-day window period where you can be negative for the hepatitis C antigen but have an elevated liver function test. It is similar to the 60-day window period for HIV testing. During the window period, you are infected, but you have not developed enough antibodies in your blood to test positive in a blood test.

Of the people who will have hepatitis C, 50% of them will progress to early mortality from cirrhosis or hepatocellular carcinoma. The morbidity factors are not of much consequence. The FDA has not approved the rather expensive alpha interferon therapy for people who have chronic hepatitis C. It has to be given at very high doses and many people cannot tolerate it. Hepatitis C will account for only a very small percentage of healthcare costs.

Questionnaires are a fairly cost effective way of finding out about hepatitis. Many people, especially immigrants or people who know they have been vaccinated against hepatitis, will be able to tell you why they test positive to hepatitis B antibodies.

TUBERCULOSIS

Worldwide, tuberculosis is one of the primary causes of mortality. In the U.S., we are seeing many more strains of resistant tuberculosis (TB) bacteria. That is a big

problem. Tuberculosis can spread very quickly and randomly, and it is difficult to control. It is quite common in most third-world countries.

Chest X-ray screening is not process effective, but the skin test screening is and should be a part of any type of medical underwriting case technique on anyone not a native-born citizen.

In North America, mortality from tuberculosis is not high, but the morbidity is quite high. TB patients require expensive antibiotics and must be confined so as not to spread the disease. Predictions from the CDC are that TB incidence will increase dramatically over the next ten years. Global trend predictions are even more astronomical.

OTHER TESTS

In medical school my professor told me, "Never get a test for which you will not know what to do with the patient if you find a positive result." In the insurance world we only see a snapshot of people. We just see them on paper in black and white as two-dimensional people and we have to make a judgment.

Cocaine and cotinine tests are obviously good tests. The cotinine test basically changed the entire underwriting world by creating smoker and nonsmoker categories. Other tests are less useful for insurance purposes. I think that we in the insurance industry have had so many lab tests presented to us, that we do not know what to do with half of the data. Unfortunately, we see that a great deal in medical underwriting. We will have a positive test and the underwriter comes in and says, "What do you think?" They say, "Well, it could be this, it could be that." But there just are not enough data in the entire application to form a good, sound assessment of the excess risk. So, even though some tests might be good for screening, they are really not that good for insurance purposes.

Clinically, I think prostate specific antigen (PSA) is a great test, but there is such a gray area between say levels of six and ten. If the PSA is over ten, then yes, you know that you should definitely decline. But for that gray area between six and ten, I honestly do not know what to do; it is like shooting in the dark. The PSA test clinically is a great screening test, but for the insurance industry, it's not so helpful.

With regard to liver function tests, what do you do with them if they are elevated and that is all you have? You do not have a hepatitis screen. People take so many over-the-counter medications now and do not realize what they are taking. People take combinations of prescription medicines, over-the-counter medicines, and all these things can elevate liver functions. Young women on birth control pills can

have elevated liver function tests. You have to have a very good detailed history and a thorough list of the person's medications before drawing a conclusion.

Again, you can have a chronic hepatitis smoldering and have this barely borderline elevated liver function test, so it is not even a matter of how high they are. It is not even relative to the underlying disease.

The relatively expensive prescription drug screen tests for so many drugs also have questionable usefulness.

GENETIC TESTING

Dr. Richard Braun: Genetic testing was mentioned several times at the general session. As Daniel Burrus described them, I think genetic testing is producing flash points where the cost of the technology is coming down such that we will very shortly be able to use it. However, I do not agree with his prediction that insurance agents will become genetic counselors any time soon.

First, we want to cover a short genetics review. Then we will discuss the definition of a genetic test, which really becomes important when people are trying to write legislation to restrict our ability to do them. Next, we will look at the breast cancer one (BRCA1) and breast cancer two (BRCA2) genetic tests. We will review the issue of genetic privacy versus access to genetic information for underwriting or risk selection. Then finally, how practical is it, which changes by the week.

You all will recall the basics of genetics from your high school and college biology. The human has 46 chromosomes, 23 pairs. These chromosomes are segmented into genes. The genes are basically something that is encoded for protein. That is the definition of a gene. These genes are located in various places. Their loci on the chromosome, for example, a gene is on the 17th chromosome, the short arm, in such and such a locus, tells us where to find the gene. Then you will see things written about base pairs. Those actually get down to the nitty-gritty of DNA and are about the genetic code itself.

Proteins are gene products. You will remember that cascade DNA codes for messenger ribonucleic acid (RNA), which then goes out into the cytoplasm of the cell and goes into transfer RNA and then codes for the protein. Basically, there are three general categories of proteins in the body. There are structural proteins that make up your muscles, your bones, the structure of the body, and the cell walls. There are functional proteins that do things like transport materials across cell membranes. There are regulatory proteins that start and stop and there are chemical reactions and catalyst reactions.

When most people think of genetic diseases and genetic disorders, they are thinking about single-gene diseases transferred from the parents to the offspring. An autosomal recessive disease like cystic fibrosis only manifests itself if you get the abnormality from both parents. The carrier state for an autosomal recessive disease can be fairly common, but the actual disease itself is not very common. An autosomal dominant disease like Huntington's chorea only requires one copy of the abnormal gene, so if either parent has it and passes it on, the offspring will develop the disease. Hemophilia is an example of an X-link disorder. Recall the sex chromosomes, the X and Y. If you have two Xs, you are a female, if you have an X and a Y, you are a male. The Y chromosome tends to be fairly inactive, so if you get an abnormality passed on your X chromosome and you are a male, you tend to manifest these X-link disorders more frequently. Females can also exhibit X-link disorders, but they must get it from both parents.

The good thing about these well-known, single-gene diseases is that while they exist, they are not all that common.

Multifactorial diseases have an inherited component but are not totally genetic. We know that coronary artery disease, diabetes, and hypertension tend to run in families, but they are not strictly genetic diseases. They are also influenced by infectious processes or the environment. For example, consider coronary artery disease. Yes, it does tend to run in families, but if you smoke, do not exercise, do not eat a good diet low in cholesterol, then you may wind up with coronary artery disease despite not having inherited it. It is multifactorial. Conversely, we cannot say a genetic predisposition means that a person will develop coronary artery disease because by changing his or her environment and doing things differently, he or she can avoid it.

Mutations to the chromosome that occur after birth can lead to acquired diseases. Most of the cancers probably are acquired disorders. For example, the ultraviolet rays from the sun cause chromosomal damage and can result in malignant melanoma.

Polymorphisms are genetic abnormalities that never manifest themselves into any kind of disease. In considering an unusual genetic code, we have to determine whether it represents a disease or a polymorphism.

What is the big deal about defining genetic tests? It is a legislative issue. No one cares about defining genetic tests unless someone tries to use the definition to prohibit, require, or restrict people. Basically, you can start out with a very narrow definition if you think somebody is going to try and restrict it and that would just restrict it to identifying alterations of DNA, chromosomes, or genes—just the genetic

material itself. People who would like to restrict risk selection entirely would like to include tests not just on the genetic material but also the gene products. Currently we do test for gene products such as PSA and HDL cholesterol. Restricting tests for gene products would cut into some of our current testing. Finally, some people want to use an all-encompassing definition that includes a family history or anything related to any kind of genetic information.

In the genetic testing debate we should let people know that we are only concerned with genetic abnormalities that result in disease, not polymorphisms.

Breast cancer is a flash-point topic. We will not have to wait three or four years to see dramatic changes but probably just a year or so. In fact, it is already occurring.

Of the 183,000 new cases of breast cancer in 1995, 85–90% are from acquired mutations after birth, leaving 10–15% from heredity. BRCA1 and the BRCA2, the two major genes involved, were discovered in the early 1990s so we have not had the opportunity to follow people over a long period of time. Most of the information we have is based on doing cross-sectional studies to look for these genes in people with breast cancer. Therefore, it is difficult to make many predictions at this point based on the studies that have been done.

An estimated incidence is one in 200 women carry the BRCA1 gene. Again, most cases of breast cancer are mutation-acquired or sporadic breast cancer not related to BRCA1 and BRCA2. BRCA1 and BRCA2 are mostly associated with the early breast cancers, so if you see breast cancer in a woman under the age of 40, then there is a dramatic increase in the likelihood that these genes are involved.

The estimated mortality effect of BRCA1 depends on the person's age. For a young person, the mortality effects are high. In the 45–50 age range, the mortality effect is similar to that for smoking. Then as the person gets older, the mortality effect diminishes.

What are some of the issues with genetic privacy versus risk selection? People who advocate restricting genetic testing say this is a different kind of test, and I would have to agree. The results not only affect the person being tested, but they potentially could affect the children and the siblings, so if you find a genetic abnormality, you may also need to test any blood relatives.

According to the ACLI's "Monitoring Attitudes of the Public" survey, people do not have any problem with our rating somebody for smoking or maybe even obesity or something the individual can potentially control, but this is different. They were born with it; they could not choose their parents. Even though it is an emotional

argument, it is true. You cannot treat it. Getting somebody to undergo a genetic test for an untreatable condition will be a challenge. You could talk about better surveillance, but there are some conditions, and I am sure everybody read in *The Wall Street Journal* about apo-E-4 alleles and the early onset of Alzheimer's, where you really cannot do much other than use surveillance. Therefore, do you really want to know? Of course, there are potential social ramifications in terms of getting married and having children.

Nine states now have laws restricting genetic testing, but the ACLI has gotten them to exempt life insurance. They have focused on underwriting and health insurance. Thirty bills were introduced in 1995 and activity picked up in 1996. In the U.S., the NAIC is actually producing a paper on genetic testing. The early drafts just provide background information on the issues and, for now, make no suggestions or recommendations. They are going to be holding hearings shortly on genetic tests. In Europe, quite a few countries like France, the Netherlands, and some of the Scandinavian countries already have laws prohibiting the use of genetic testing. England is going through a dialogue process.

The industry needs equal access to genetic information to control antiselection. We need to know what the applicant knows.

We feel we need a level playing field. Why should we have to favor someone paralyzed due to a genetic condition, say muscular dystrophy, over somebody paralyzed in a swimming accident? They have the same mortality.

Guaranteed-issue coverage is available, but it may be unaffordable to some needing life insurance. On the other hand, if we have to ignore people's genetic conditions and mix them with those without such conditions, the higher claims will increase the price of insurance making it harder to afford for other individuals.

Finally, how practical is genetic testing? Only two months ago, a BRCA1 test cost \$670. Taking the present value of excess mortality times the prevalence of disease times the sensitivity of the test times, the proportion of the savings in the test means, for a 45-year-old woman, the test is valuable at amounts of \$10 million and up. Today, this test costs only \$295, and it has value at \$6 and \$7 million. I think the cost will continue to come down. We are going to have to deal with this issue as it becomes more prevalent.

UNDERWRITING TECHNOLOGIES

Mr. Atkins: Our next topic is underwriting technology. Richard, can you tell us what is wrong with yesterday's methods and technologies and processes and how we can improve them in the future?

Dr. Braun: What is wrong with today's way of doing things? First, everything comes in on paper. In order to get the data, information, knowledge, or wisdom, you have to manually transfer the data from the paper to the system. Second, customers are not going to sit around and wait weeks for us to issue their policies when they can get a mortgage in 24 hours, a hamburger in 1 minute, and their gas tank filled in 5 minutes.

We need to increase efficiency, get more production per employee, and improve customer time service. If our employees have more time, they are able to talk to the agents and customers so they have more quality contact servicing that customer. We also want to reduce mortality expenses by improving the quality of decisions and reducing errors.

It always helps to have something new and exciting for the field force. Underwriting technology can lead to marketing pizzazz. If we can gather our data electronically, new distribution channels like worksite marketing, direct-mail marketing, telemarketing, and others will open up.

To re-engineer the underwriting process, you should go back to first principles and ask yourself, "How are we going to do all this?" Look at each person and function in the process. For each function, can you cut it? Automate it? Use technology to improve it? The customer generally chooses the product and amount and provides the information for the application. The agent finds new customers, helps customers to perform their tasks, and provides ongoing service to existing customers. The new business specialist, sometimes distinct from the underwriter, keeps track of the state and the legal requirements and the compliance issues. He knows about forms and products. The new business specialist interacts with the administration system, pulls the underwriting file together and knows how to get an issued case printed and maybe even does some jet underwriting for some simple kind of risk selection decision. The underwriter makes a decision about the individual risk and then generally spends some time on the phone with the agent.

External information providers like Equifax, Hooper Holmes/Portamedic, Medical Information Bureau (MIB), and Lab 1 provide you with laboratory results such as blood, urine, and saliva tests. They also handle paramedical exams, electrocardiograms, treadmills, MIBs, and other underwriting requirements you need to make that risk selection decision.

Let's see what technologies affect the people involved in the underwriting process. Customer technologies like kiosks, the Internet, and telemarketing have cut agents out of the loop. On the other hand, life insurance does still need to be sold to a certain segment of the population, so agents are not going away any time soon. Now, with laptop software, they have more opportunities to do more professional presentations. Agents have many tools at their disposal to help them keep track of clients. One of the new things coming along is more intelligent data collection such as an electronic application with built-in intelligence, helping avoid some downstream requirements by collecting more information at the point of sale. If a customer answers 'Yes' to the question about asthma, the electronic application will ask a few more questions, collecting enough information to eliminate having to wait three weeks for an attending physician's statement. Also, the system can prompt the agents to fill out needed supplemental forms electronically so they cannot forget to fill them out. Now, with the power of the laptop computers and software available, agents can do field underwriting. The agent can submit the application, supplemental forms, and even the applicant's signature electronically, thus eliminating the three-day mail time. Many companies are giving agents remote policyowner service capability. Finally, certain agencies and independent agents have systems that tell them who has the best deal on certain impairments or certain products. They find the best deal for their clients.

New business specialists use data management systems to electronically receive the underwriting requirements and tie them to an electronic file. Unless something goes wrong, this all happens automatically. They use document imaging systems. They use knowledge-based complex screening systems to identify problems requiring their attention. Finally, companies are providing new business specialists more user-friendly data entry front ends on their administrative systems and knowledge-based systems.

Underwriters use knowledge-based underwriting systems as a sophisticated, complex case screener kicking out problems for the underwriters. Expert impairment modules help them evaluate an impairment such as diabetes or coronary disease in an interactive fashion. Responding to a series of questions, the underwriter submits answers from the attending physician's statement (APS). The system then suggests a rating. The system will not issue the case until all the problems are addressed and all the requirements are submitted. By collecting data, you can produce information. The underwriters get feedback through reports and audits. Like the new business specialists, the underwriters are also working with electronic data interchange, electronic manuals, and imaging.

All of these processes (from the agents entering the electronic applications on their laptops, the electronic data interchange, the new business and provider work

stations, and the underwriting workstations) interact with the administration system and the screening system.

In this all-electronic situation, any of these pieces or even pieces of the pieces can fit anywhere. At some companies, agents collect part one of the application and information providers collect the medical information.

Mr. Atkins: So you are saying this goes beyond just replacing paper with images. It is usable data, with no paper and fewer images, which we convert to information, knowledge, and finally wisdom.

Dr. Braun: Right. The only data source that still gives us a problem is the attending physician's statement. Even though it is not really in a data format, there are information providers that will convert it to a data format for a price. But if you collect enough detailed information on the agent's workstation and information provider's workstation, you can reduce the number of APSs needed. APSs slow down the whole process anyway.

What are some of the keys to successfully implement something like this? First, collect the data in chunks. Let different people collect different chunks. Just make sure that the right person is collecting each type of data. Next, collect enough detailed information to shorten the process. Also, figure out which legacy systems you are going to keep and map the data to them so you only do data entry once and so they are integrated into the whole flow of information. Be sure to match the system tools to your operation and your data processing talent. Finally, do not try to implement everything at once. Start with just a small part, implement it, and move to the next. This is more a process than just a short-term project. Continue biting off more and more until you are finished.

How does it make you money? Your new business staff gets more efficient so they can handle a greater workload. An improved turnaround time should give you a better placement ratio bringing in more revenue. You are reducing your errors and hopefully mortality expenses.

Mr. Atkins: What does it actually take to implement one of these systems?

Dr. Braun: That depends on the extent of the implementation, but data mapping a knowledge-based system to an administrative system takes three to five full-time people anywhere from six to nine months. Implementing the connection with your vendors takes four to six months depending on the vendors.

Mr. Atkins: What additional tools do you suppose knowledge engineers are imagining for the future?

Dr. Braun: Data warehousing and inputting all that information is an interesting concept. From the electronic application, with the posted occupation and beneficiaries (children) to the underwriter's action you have a large amount of data. Engineers are developing software tools which are a hybrid between doing a multivariant regression and doing a neuro-network processing where you can actually split conceptual information into something called *bins*. Basically, this software goes through and looks for relationships between concepts and hopefully finds some information that you were not aware of before, some relationships that nobody had noticed.

Another concept under development is an impairment frame. *Frame* is a knowledge-engineering term. If I say "car" to you, a picture jumps in your head. It has four wheels, a motor, a seat for the driver, and so on. Likewise when you consider a risk or impairment, the impairment frame will link you to other representations like MIB codes and International Classification of Diseases-9th Revision, Clinical Modification (ICD-9-CM) codes, which link the treatments and the prognosis.

INTERNATIONAL UNDERWRITING

Mr. Atkins: Dr. Kushnir, I hear a great deal about the international markets. Several people have come to my company and told us that we need to go international. Are many Canadian and U.S. companies involved? If not, why should they be? How does this process differ from underwriting in North America?

Dr. Kushnir: Large companies, like Met Life, Sun Life, and American International Group (AIG), have always been very aggressive in the international markets. For example, AIG was founded in China many years ago, was ousted for obvious political reasons, and was the first insurance company to return. In 1980, I guess on the coattails of Nixon, the President of AIG went back to China. They were also the first ones to go into Kazakhstan in 1993. While some companies are aggressively pursuing international business, others, such as Met Life, are moving a little slower. Interestingly enough, Richard spoke about laptop computers for agents. Well, Met Life saw that due to cultural reasons, they not only had to give their agents laptops, but they needed to provide them with bicycles. That was a very big cultural point. These things may sound rather silly, but they create good business. You must understand what each culture needs and accommodate that need without an attitude.

Every company will be touched by the big wave of international business in the next ten years, if not touched by it already. North America accounts for only one third of the entire global insurance market so there is still much untapped territory. We are creating many products here but have not done too well finding people to sell them to. I think that we have to open our eyes, bite the bullet, and take a risk on some international markets.

Why enter these markets? Except for the African continent they have an expanding middle class. Only Africa has not progressed at the same pace as the rest of the world.

Health and social services are shifting to the private sector. For example, back in 1972, Brazil knew that they would not be able to meet any of their planned payouts for social services, so they contracted with private sector companies to provide the services. Many other countries did so as well.

In eastern Europe, the Pacific Rim, and Latin America, privatization of institutions generated new needs for pension, life, and health insurance. Eastern Europe lacks good marketing support and sophisticated insurance products. If any of you actuaries want to move to Hungary or Czechoslovakia, they can use you.

It sounds simplistic to say underwriting will vary from country to country, but it is extremely complicated, particularly in countries like India or China where you not only have a different culture and a different way of thinking, but also so many subdivisions and so many different languages that it is not even like one country. In Hungary, with its very homogenous population, you can design a product for a basic Hungarian man or woman. But in China and India, different regions with different languages require different products.

Expect little or no control over the quality of medical information. It will certainly be easier to assess an applicant's current medical status than to get any information on their past medical history.

North Americans are very well educated about risk factors. The rest of the world is not. Most of Europe still smokes. Every time I go back to France, everybody is smoking, including the doctors and women. That is in western Europe. Convincing the international market about the need to have smoker and nonsmoker rates will be a challenge and an opportunity.

Also, expect return on equity to vary for each country. You will not have control over producers and agents because you are going to have to use the people who live there, speak the language fluently, and understand the culture. It requires trust.

Expect more fraudulent claims. Whenever I review claims from Latin America, I see much more murder for money and for insurance. I also see much more overt corruption where police, governments, judges, and embassies were bribed. Even though we catch quite a few fraudulent claims, I am sure that we miss a large number too.

A study done by the largest Mexican insurance company, Grupa Nacional Provincial, showed traffic accidents accounting for 32% of all claims. Other places in Latin America, such as Brazil and Argentina, in particular, show the same trends in traffic accidents, in violent deaths such as homicides, and death by other accidents.

Mr. Atkins: Thirty-two percent of the life insurance death claims are due to traffic accidents. Think about what that would be if that was in the U.S. That is a huge number.

Let's go back to something a little calmer. Tell us about the cost of underwriting policies overseas.

Dr. Kushnir: The cost of underwriting will be expensive initially. Contracting with an existing lab in a foreign country for the tests you want will cost about \$150 per applicant. In the U.S. it would only cost \$50–75 per applicant.

To promote trust and business growth, it is important to know the language. In other countries, people do feel that it is a show of great respect if you make an attempt to learn their language, even if you butcher it. You should try to speak their language first, even if you know they speak English. If they see that you are completely crippled with their language, then they will say, "We can speak English." That alone creates a good, positive image that is important in foreign countries. Also, you should understand and respect their culture. For example, in some cultures you will not be able to get blood tests because it is against their religion or against their cultural background to have blood drawn, so you may have to make arrangements for urine or saliva testing.

Patience, close communication, and tenacity pay off. You should not leave a country just because a civil war breaks out. Lincoln saw Chile through a couple of civil wars. Everything went bankrupt, but they stayed there. The Chileans love Lincoln National Life.

You have to develop more than just business relationships. Almost every single international market contact will want to get to know you—find out who you are, your spouse's name, your kids, and your family. It cements a good and growing

professional relationship. And remember, the know-it-all American attitude can be detrimental to success.

Finally, be flexible. In Latin America the word *mañana* is taken very literally. They say, "Do not worry, we will do this tomorrow," and they mean it. Do not make expectations along Western culture standards.

Mr. Atkins: From an underwriter's viewpoint, is international underwriting a new specialty or will domestic underwriting and international underwriting soon merge?

Dr. Kushnir: I believe international underwriting will become a new specialty. Being multilingual and having traveled or lived in other countries will be a definite asset. America is a big place and most of us cannot even travel our own country, much less the world. But people in Europe or many other places in the world travel a great deal because everything is much closer. International experience is lacking in many of us but needs to be cultivated.

Mr. Atkins: You described all these new processes and fancy new systems, but can a small company afford the investment?

Dr. Braun: Yes. We have several small companies with one underwriter utilizing knowledge-based systems. Recall that most of the expenses come from hooking it up to the administrative system to make everything automatic. If you are willing, enter data a couple of times, and you can use it inexpensively.

From the Floor: I understand the home AIDS test is approved now. How will that affect underwriting?

Dr. Kushnir: I do not believe the availability of the home HIV test will affect insured mortality. We are already testing the insured population so it should not make much difference. Maybe suicide rates will go up if people test themselves at home, find out they are HIV positive, and decide to kill themselves.

Dr. Braun: We have a concern about people finding the HIV virus, obtaining a viatical settlement, and then dying within the contestable period and leaving a big mess. Another point, you should monitor your activity below your testing threshold in states like Texas and Florida where the home AIDS test is now available. If people know they are positive, they will just buy multiple small policies.

Mr. Atkins: Marta, is there any way to estimate how many people will ultimately die from complications from Hepatitis C versus AIDS, for example?

Dr. Kushnir: Fewer definitely. Now that the hepatitis C test has gotten sensitive and specific enough, we can see the mortality is nowhere near the top ten causes of death. Alcoholism, the eighth highest cause of death in this country, is higher on the scale. I do not think it is something that we have to be extremely concerned about.

Mr. Atkins: What is the underwriting decision when somebody is positive for this virus?

Dr. Kushnir: If their liver function tests are normal, then we treat them as standard. If the liver function tests are abnormal, they are declined.