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Enterprise Risk Management for Health Actuaries

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Summary: Enterprise Risk Management (ERM) was identified by Harvard Business Review as one of the 20 breakthrough ideas in management in 2004. Are you ahead of or behind the curve? Panelists in this session provide an overview of ERM: what it is and how it has evolved in the insurance industry. They also discuss various risks that may be part of an ERM framework for health insurance organizations and how individual actuaries can start to think about ERM within the context of their own organizations and roles.

MR. RAJEEV MAXWELL DUTT: I'm going to define ERM using sort of an accountant's definition that was put out by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) around two and a half years ago. It's a process affected by an entity's board of directors, management or other personnel, applied in a strategy setting and across the enterprise that is designed to identify potential events that may affect the entity and manage risk to be within its risk appetite to provide reasonable assurance regarding the achievement of entity goals. It's a very broad definition. When I initially saw it I wasn't sure what they were talking about. But when I dug deeper into it and took each segment between the commas, I got a better understanding of how actuaries could be involved with this and what implications it would have in the health industry.

The SOA Health Enterprise Risk Management Task Force started with a few sub-

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groups. One of the sub-groups is the specialty guide for enterprise risk management for a health entity. John Stark, myself, Kara Clark, Trevor Pollitt and Sudha Shenoy sit on that task force. We've been working on a document for the last year and a half or so, and a lot of the material is covered in this document. The year-end mapping for healthy ERM is available on the SOA site. A lot of material here references that. With that we'll get right into it with Kara Clark starting with the introduction.

MS. KARA L. CLARK: ERM was named by the editors of *Harvard Business Review* as one of the best new ideas in management in 2004. And yet, most health actuaries I've talked to in the course of my work don't necessarily seem to be very focused on it or that familiar with it. I've been a staff actuary for the health area at the Society for about five and a half years now, and my exposure to the concept of ERM has really grown over the last couple of years through my work with the Health Risk Management Task Force that Rajeev has mentioned, as well as my exposure to our other areas of practice within the SOA. My background has always been in health insurance. I have worked as an employee benefits consultant. I've been in this nontraditional role at the SOA for about five and a half years.

ERM is an emerging and evolving discipline. No one owns it, and there are several definitions for it. A definition that comes from our sister actuarial organization, the Casualty Actuarial Society (CAS), is that it is a discipline by which an organization in any industry assesses, controls, monitors and exploits risk from all sources for the purpose of improving value in both the short and long term to the organization stakeholders.

I think there are three main things to take away from this particular definition. The first is that ERM is all about integration. It is about looking at risk holistically. I think that is one of the differences in ERM versus say a traditional risk management approach, which tends to be more of a silo viewpoint.

The second is that it is not just about the downside of risk and trying to avoid that. It is also about the upside of risk and potentially taking advantage of areas where you manage risk better than your competition, and that might give you a potential competitive edge. Finally, it can apply to any industry. Health actuaries tend to work with just a few stakeholders in the health-care system, as I'm probably sure you're well aware. We tend to work for health care, insurance companies, managed care organizations and consulting firms. ERM gives health actuaries an opportunity to work with other players within the system. It is an opportunity for us as a profession to get out and work for some nontraditional employers. It provides us an opportunity to expand our view and our influence in the industry.

I think ERM is really about better information to make better decisions. Going back to the *Harvard Business Review* article of February 2004, it states, "It allows companies to make decisions with greater speed and confidence. It's like driving a car—you can go fast if you know you have really good brakes." I went to the

Enterprise Risk Management Workshop in Chicago on May 1, and it was an introduction to ERM. I heard Towers Perrin talk about credible insights. You can't plan for every possible outcome or scenario, but if you plan for enough then you develop credible insights that you can draw upon when and if the unexpected does happen. We think about fire drills and preparing in that way.

David Ingram at that same program talked about the relatively recent blackout in New York City. I think surprising in some respects that there wasn't this mass pandemonium when the blackout occurred in New York. He, being from New York, talked about that experience and that the authorities have learned many techniques and emergency processes because of 9/11. So out of that tragedy they were able to develop some credible insights then that they were able to apply to a future disaster.

Where did ERM come from? How is it emerged in business? It came from a couple of different areas in particular. There were a number of catalysts for it. Some came from overseas and also from the banking industry. Two of these catalysts were the Turnbull Initiative and the Basel II Accord. I think that's why there's a stronger foothold in say life insurance than there has been in the health area. But I think there are still very many health applications because other catalysts are Sarbanes Oxley, the COSO framework, rating agencies and then, of course, the public demand for financial transparency, given some of the corporate issues in the last few years. Those all apply to health organizations as well. So even if you haven't seen it, I think it is very likely that these catalysts are going to be impacting the health industry as well.

I gave a version of this presentation last October to the Chicago Actuarial Association and then again last March, and I was surprised in some respects when I went to review it. I found that a lot had changed in just a few months. And then I wondered why I was so surprised because, as I mentioned, this is a very rapidly evolving area. And in general, according to a fairly recently released survey by Towers Perrin, 86 percent of their respondents indicated that ERM is more of a priority today than it was a year ago. And these are insurance companies globally, not just life insurance companies, but also P&C, health, etc.

Clark Slide 3, Page 2 really illustrates some of our prior points. I want to mention that this needs to be adjusted. The percentages at the bottom should be 20, 40, 60 and 80 percent. The key objective for improving risk management, per the survey, is about better decision-making. The top three are really more about giving the positive upside to ERM than a defensive measure. You can see that if you compare protect shareholder value, which is fourth on the list, to improve shareholder value, which is third. And a little later John is going to talk about why the reason your company is implementing ERM may impact its success within your organization.

Continuing on with the ERM movement, what's changed? Are there more risks today than there were in prior years? Well, maybe. It seems that the once-in-a-

lifetime event is happening once every couple of years now. So that might be true. But certainly, in terms of risk awareness, there are more visible corporate failures, more regulation, more pressure on economic performance and different ways to manage risk. I think that's another reason or a less formal catalyst for why you're seeing ERM in the marketplace.

There is a challenge to ERM for organizations to consider implementing. It has to do with demonstrating the return on investment, because implementing ERM is going to cost the organization both in hard dollars as well as soft dollars. And so, the organization is going to have to think about what it gets for that money. It can be challenging to quantify and measure losses that didn't happen or exploited opportunities. For example, how do you quantify the benefits of your organization for being first to market as opposed to second to market? And then how do you relate that back to the present or being because of having a solid ERM process? I think being able to really quantify that investment is a challenge for organizations as they think about implementing it. Even for those who have implemented it, I think it will be a challenge for them to continue to want to invest in this.

That's the very, very high level overview, but I want to go around one more time and go into a little bit more depth. Risk, as you know, is a product of two essential ingredients: Uncertainty, of which likelihood and magnitude are part, and also preferences. So even if an event is uncertain, if we don't care which outcomes happen then it's not as much of a problem.

In the case of ERM, though, the question is: Whose preferences are we talking about? Here we're talking about the preferences of the enterprise. We're thinking about enhancing the value of the enterprise to its owner. We're thinking about the totality of the organization as opposed to the preferences of any individual perspective, or silo. ERM is an action-oriented process. It is creative; it is dynamic; and it is proactive. It requires a discipline application of a framework. It involves three major steps: Risk identification and classification; risk measurement and prioritization; and management and aggregation of risk. We're going to take a look at each of these.

In terms of risk identification, the importance is to identify all key risk exposures. Make sure no risk is left behind here. It is very easy to ignore unlikely risks. You might think that will never happen, so it won't be on our radar screen, and of course, then that does happen. It's easy to miss sources of risk. And very importantly, risk is dynamic. It's constantly changing. So it requires a good process flow, and that's one of the reasons it requires this consistent discipline process in terms of the ERM framework.

Risk measurement involves identifying the range of outcomes and the likelihood of different outcomes. It also involves, then, the relationship between the drivers of those outcomes and how, if they change, the outcomes might change. Risk measurement can be very difficult for a number of reasons, so this is easier said

than done in many cases. The challenges include just the general lack of data, and, in particular, a lack of data-entailed probabilities. What do you do if you only have one event or no events about a potential risk? What if it's never occurred before but it could occur? What do I do with that information in terms of thinking about future probabilities that becomes even more challenging? Of course, we work in an ever-changing environment, so that makes it more challenging as well. Therefore, it becomes an art in addition to a science. Actuaries have a tendency to be less comfortable for some of the more nebulous risks if we think we can't really quantify something. We need to qualify it. But the important thing is to not miss something that's key.

Once you identified your key risk, you want to start aggregating. We have measures of individual risk and measures of enterprise-wide risk, which takes into account correlations and relationship. So when you start to build and put risk together, which risks get worse when they're combined and where might there be some natural hedges across the organization? This should be institutionalized as part of your process.

The third major step is risk management. Management requires objective setting and developing action plans and tactics. It first involves a conversation within your organization about what the organization's risk preferences and tolerances are. That is used so you can operate within the organization's risk boundary. You need to be able to protect key resources, although this is going to differ by organization. There is no right answer to this. This is something that's going to be unique, but it should involve protecting key resources, satisfying external monitors and, of course, any other objectives that an organization might set for itself.

There are various strategies to manage risks. Clark Slide 1, page 6 is a fairly familiar graph, but I got the idea to put it in here from a contingency article I read last summer. We have our traditional ways to look at the quadrant. We typically want to self-insure low frequency and low severity events. Low frequency, high severity events insurance has been a typical approach. High frequency and low severity might involve lock control or some sort of partial insurance. And then you want to avoid events that would be high severity and high frequency.

But new techniques are emerging in these areas. In addition to some of the newer financial techniques, which we're really not going to get into in this particular session, there is the aspect of contingency planning, which goes back to the fire drill concept. What are we going to do if? So I think the techniques that I went through here describe more of the financial tools available to manage risk. But there are other ways to be looking at that as well.

Recent developments in ERM recognize that it is a process, and it is a process that needs to be managed. So risk management requires not only technical skills, but also leadership and communication skills. The business must have the savvy to understand the entire enterprise both from an internal and external perspective.

ERM has the potential to add value to a wide range of organizations and industries.

Going back to the ERM symposium in Chicago, there was a session on the energy industry. I thought this was really interesting, because all of the challenges they talked about being part of the energy industry, I thought you could be talking about with health care. There are challenges with infrastructure, information technology (IT), etc. I think that there are a lot of opportunities to learn from other industries as ERM becomes more widespread.

Another emerging idea or recognition is that there is more to risk than buying insurance. It's not just about the financial tools. You can buy insurance, for example, to manage your products liability risk. But if you have a product failure, the reputational damage that it can do could be irreparable. If we think back to the Tylenol tampering in the 1980s, that tends to be a classic case to recognize risk management done very well. I mean they immediately went out to re-establish trust in the product. I think that's a good example to remember when you're thinking about ERM going beyond the financial tools or going beyond buying insurance. Think about what they went through to re-establish trust in their product.

It's also a nice example of the potential application for ERM outside of the insurance industry. That was a consumer product. You can think of others as well. What happens to pharmaceutical company when its blockbuster drug is pulled from the shelf for whatever reason? What happens then? That's a tremendous risk to that kind of organization potentially.

There are other recent developments. These are common risk categories that you'll often see described as part of an ERM framework. One is market risk, which involves external factors to the economy and to a particular industry. Credit and underwriting risk involving the selection of contracting counterparties is another one. There is also operational risk, through process and control factors. And when we get our work with the Health Risk Management Task Force we looked at these a little bit differently. We'll show you how we mapped our risk categories into these four general ones that you'll often see.

This is a growing body of research. There are a lot of new techniques that are evolving. So when we have this session next year, it will not look the same. This is evolving very rapidly. There are a lot of researchers and practitioners interested in this particular topic.

Finally, I think that one of the areas that will be growing, where there will be concentration in the future, is developing better techniques for integrating and aggregating risk at the enterprise level. If you go to the Towers Perrin survey, which is available on the Web, you will see that that's an area where people do not necessarily feel that they are doing all that they could do. I suspect that this is an area where you'll see a lot of additional work in the future.

Even if you don't have a perfect process, it is important to get started. You can initiate these conversations in your organization. Talk to your managers and your senior leadership and find out what they think about ERM. Do they see this as something that's going to be happening or emerging within the health organization? Are they aware of it? I think starting those dialogues at this point in time, and not waiting until you have something that can be perfectly implemented, would be an important thing to take away from this discussion.

I will turn it over to Rajeev to get into a little bit more detail about application and health.

MR. DUTT: On the Health Risk Management Task Force, one of the first jobs we did was to try to identify all the different risks that an organization could be exposed to. We tried to do a mapping to some of these general risk categories. I'm going to go through that in detail. It's also available on the SOA Web site. As a bonus, John Stark actually used that mapping document for an application with his employer and he'll go through that.

I work for Milliman in Chicago. I've been with their health practice for almost five years. I'm involved with mergers and acquisitions in the group industry, traditional health consulting and, most recently, more general financial risk management.

I'm going to recap some of what Kara talked about. There is a necessary framework that's required to even start thinking about ERM for a health organization, or for any organization for that matter. The ERM strategy has to support the business strategy. You have to avoid conflicting interests in compensation and initiatives or objectives for staff and senior management. The critical risks have to be identified. You could possibly come up with 200 risks. As Kara said, leave no risk behind. The idea is really to focus on the ones that are critical to our organization, and there is a potential to be able to monitor and manage that risk downstream.

You must also define the risk responsibilities and assign them to members of the organization just so that there is some accountability to the implementation of this ERM process. You have to really develop a corporate culture where risk is a shared responsibility. You don't want it to fall upon three to 15 members of a group within the organization. It really needs to fall upon every employee.

The mapping of health company risks, the document that I'm going to go through, takes a large medical company perspective. In order to complete this document we needed to focus on a singular perspective, so long-term disability (LTD), long-term care and so forth have been omitted. The risk categories that we selected were environmental risk, financial risk, operational risk, pricing risk, reputation risk and strategic risk. Within those risk categories we thought of several sub-categories that would apply. We tried to put definitions and examples together, which are in our risk-mapping document. I won't go through all of the items here, but I will mention some of them.

The first environment risk is the buyer environment, or the risk that the target market changes and that buyers of insurance products will experience a positive or negative impact that strengthens or lessens their position relative to others. The second risk is competition, which is an overall broad category with many sub-categories below it. But in order to avoid having 200 lists we leave it at competition for now. Another category is economic risk. External fraud is another environmental risk. An example of that would be provider fraud or the risk that providers are billing fraudulently. Fraud will show up many times in the mapping document. Legal risk is another one that also shows up a few times, such as under environmental risk. This is the risk that the decisions of the legal system will negatively impact the financial results of the insurer. Similarly, there is legislative and regulatory risk. Supplier environment is another environmental risk. This is the risk that suppliers to the insurance market will experience a positive or negative operational impact that strengthens or lessens their position relative to the private insurance industry.

Moving onto financial risk, there are a number of factors. These include asset defaults, data risk, financial viability issues, interest rate risks and liquidity risks, most of which are well known. There is also model risk, or the risk that a model does not reflect a process being analyzed. Using the wrong model or the inappropriate parameters will lead us to believe that well, the model said so, so it must be true. But we have to challenge that model. Reinvestment risk and reserve adequacy are two others under the financial risk category.

Next, there is operational risk. Traditionally this is the area where actuaries may not have focused a great deal of attention. The list of risk under this category is rather lengthy, so I will go through only a few of them. This first is billing collections. This is the risk that expected cash inflows failed to materialize or were received late as a result of lax billing collection processes. Claims processing is another risk. It is the risk that cash outflows will be processed incorrectly or unnecessarily quickly, including disputes or lawsuits related to claims management, claims adjudication or case management. Contract wording and data technology and management risks also exist and are fairly straightforward. Internal fraud is an operational risk. This is the risk that adverse financial consequences going into internal fraudulent conduct affect the company adversely.

There are also human resources risks. That's an interesting one. This is the risk that the firm cannot or does not hire or contract with persons adequately skilled or experienced to perform the necessary functions of their job. Some of this is taken for granted, and when we talk about measuring and monitoring, a lot of these things are very hard to do. But, it is important to identify them and at least have a thought process in place.

Under operation risks there are also network management risks, reinsurance risks and sales force risks, as well as training and vendor relations risks.

Now this next one I think we'll all be familiar with. The next category is pricing risk, which includes familiar anti-selection, authority and competition risks. There are also data risks, which are based on the possibility of data being used incorrectly because it may be inadequate, incomplete or inconsistently used throughout the organization. Financial viability of the captivated providers is another risk under pricing. You're interested in not only their financial viability, but what ERM process they have in place. Again, model risk is showing up under pricing risk. This is from the pricing perspective. Mortality and regulatory or legislative issues also affect pricing. There are also reinsurance risks, or that there will be adverse financial outcomes associated with the availability of reinsurance, the cost of reinsurance or that the extensive form of reinsurance selected is not in alignment with your own company's goals. Under pricing risk also are many forms of trend issues, such as inflation, intensity, technology and utilization. And finally in the pricing risk category are underwriting risks.

Reputation risk is the next group. Under this heading are a few items that have been hitting the papers recently. I'd like to go through this topic in a bit more detail. One external risk is associated with disgruntled policyholders. These are the risks that company resources are expended because of a policyholder bringing either positive or negative attention to the corporation. The risk is difficult to gauge until the issue is raised. But it's important to have a policy as to how to address this type of activity. Many times e-mails are sent out within an organization that say such and such has happened, if anybody approaches you please direct their query to so and so person in the legal department. Something as simple as that is an effective initial tool for ERM in this area.

Another external factor in reputation risk is rating agencies. This is the risk that certain industry or company actions result in a negative change to the company's rating. A third external factor is stock analysis risk. This is the risk that industry analysis misinterprets corporate information or shows impatience in the results of mid- or long-term corporate strategies. Those are all from the external point of view, but there are internal issues also, the first of which is claims adjudication, or the risk that claims are adjudicated in a manner that's negative to the expectations of policyholders or providers. Another internal risk is that of corporate governance. This is the risk that a corporate leader's or board's view is seen as negative to the public. Internally, there is also distribution risk, or the risk that misleading or overly forceful sales tactics destroy the reputation of the organization. And fraud, yet again, is an internal reputation risk. There is a risk that internal control measures are insufficient to prevent ongoing or severe fraud.

Finally in our list of risk categories we come to strategic risks. Here we talk about capital management. There is also a risk that growth, whether intentional or unintentional, is mismanaged. There is risk that incentives may be misaligned with corporate strategy, or that there will be a management failure. Mergers and acquisitions also carry strategic risks. In an expansion strategy, one risk would be the risk that an acceptable candidate is unavailable or that insufficient due diligence

was done.

There are also risks associated with network management and reinsurance. That's an exhaustive list. It took 10 or 11 meetings of our group to put that together. Of course, it is not all-encompassing. This is just what we decided would be an initial first pass of completeness and guidance for somebody looking at risk for their corporation.

Recently in our group we talked about risk correlations. We put together a matrix, which I've not presented here but you will see on the Web site. There we tried to identify strong and weak correlations of all the risks identified in the mapping document. That was our pass at what risks worked together, what worked separately, what was in isolation and so forth. It's important for your own company to view all the risks that you wish to manage and monitor and see whether there are strategies that could effectively manage handfuls at a time.

This is on the SOA Web site and it is in the Health Section's area. There is an Enterprise Risk Management Section. Within that there are eight or nine categories where health risk management is mentioned as one of them. The mapping document just before we finalized on the correlations was posted there.

Next I'm going to discuss risk measurement, which is a difficult thing. Of all the risks that I went through on our mapping document, very few of them have a measurement process that is intuitive. But it is important to identify the risks that are out there and then sort of brainstorm with respect to how you could possibly quantify that risk. A few measurement items, not necessarily tying to any one of the risks, are the distribution, or the range or stochastic distribution, of cash flows earnings, present value of earnings or the return. Embedded value is a standard measure of value. The embedded value equals the present value of earnings that can be distributed to shareholders, plus the market value of free surplus. So it's different from the appraisal value.

Finally, economic capital is a measurement item. This seems to be one of the ways that I see clients trying to address this on their own. Basically, they are developing factors for a variety of the risk categories that they feel they can quantify for their company. Our group is in fact trying to put together a real life, up-to-date case study. We have targeted a few firms in the Illinois area, and we are possibly going to go in and try to analyze the companies' risk framework and take them through this risk-mapping process. That's at the initial stages right now, but in any event I've put together Dutt Slide 3, page 11 as an example of how this might be done.

Now the idea here is that there are 12 categories that companies decided are ones that they're interested in and they have some hopes of quantifying and ultimately managing. These 12 appear in various forms in our risk-mapping document. But of course, the remaining roughly 30 are missing. The idea is that you cannot plan for all risks. However, by planning for a few, you gain insights into many. The

viewpoint here is to see what we're aware of and what we can do with it.

I'm going to go through some of these quickly. First I want to discuss anti-selection. The thought process of the management as they were going through these categories was: Are we keeping the right cases? When we review the rating history and dissect the earning curve loss ratios, are we looking at the right segments? Are we looking at the overall book versus a sub-segment? There are line-of-business issues, such as the policy level versus the coverage level for their group policyholders. Whatever coverage had the highest amount of premium that's what that policy was called. In other words, if LTD was 60 percent of the premium, then that was an LTD client. The alternative was dissecting it at the policy level by splitting the benefit coverages at the policy level.

Geographical, of course, and case size are two other well-known items. And this was just from the anti-selection point of view with their definition of anti-selection.

Competition is another one. This is a balancing act between rates that are sufficient for expected claims, expenses and profits. The sales division also has to be comfortable with the volume being managed. How the actual expenses compare to plan is also an issue. Oftentimes you price at a fixed rate and then you discover later on that you had mispriced it because the rate was wrong. Monitoring subsidy, or the sold versus required, is also a part of competition. John talks about this a great deal. He says is this a rate change you want today or for all of last week or for all month or for the whole year? It's important to be able to monitor that in order to ultimately manage it, especially in line with margins eroding in the life and health arena.

Data is the next item. What are the quality and the comprehensive of the information? Is everybody using the data the same way? The underwriting policy also plays a role in data. Making sure the cells are homogenous and sufficiently credible is key. And then there are issues of confidentiality and making sure, first of all, that you comply with the confidentiality policy, but in doing so you continue to understand the data as you remove sensitive items.

In this particular example, they were interested in the vendor credit risk and management of the area that was given charge to manage the provider contract portfolio. They were concerned about their negotiation expertise. It was always the same group that negotiated all the time. In fact, they weren't sure if they were getting the best deals that they could, and that was something that they brought to the table as a potential risk item. Other issues were viability of their provider's and the vendor's own ERM. This is something that they never thought of. They were concerned with their own internal process, but were forgetting about the ERM processes of their partners.

Volatility is the next item. There are many components here to make up volatility, and this group wanted to make sure that they identified these components in order

to have some hopes of one day managing it. A list of the ideas that they had here includes: the mix of the illnesses; new procedures being introduced or demanded; varying results from disease management strategies; legislative mandates; economic instability; fraud; and processing issues.

I'm going to put the next categories together and include regulatory, legislative and legal in one group. Issues here are things like community rating and premium limitations, the Health Insurance Portability and Accountability Act of 1996 (HIPAA), mandated benefits, national health care and any legal precedents that have been established in the marketplace.

In the past, this organization became aware of things that were happening to its competition and in its industry well after the fact. It set up a unit that really got involved at the initial steps of any of these developments just in order for it to manage its own reaction to any of these initiatives.

Reputation was another item it wanted to keep a handle on. This obviously hit its road map because of the recent activity in the market with respect to reputation.

Reinsurance was also a concern. Availability was part of that. What if there were too few reinsurers for its ongoing strategy and what would it do if one of its partners were to pull out? This was something that the organization hadn't really addressed in any formal form in the past.

The guaranteed period was another item it wanted to get a handle on. Here I want to talk a little bit about critical illness (CI) and disability income (DI), even though I said our risk-mapping was from a medical company perspective. This company was concerned about its premium and guaranteed periods. It wanted to make sure that not only its asset policy was in line with this, but also its overall operational policy was in line. Of course, here guaranteed periods differ between medical and LTC. It was concerned about hedging strategies to use during the guaranteed period. Stochastic scenarios were brought into its analysis, managing the risk across all benefit lines; in other words, offsetting trends, interest rate shifts and if there was a shortage of reinsurance, there were possibilities for securitization in ultimately segment divestiture.

Catastrophic was the final item. SARS was in the papers at the time and so it was on the list: terrorism, policy limits and this company had a P&C arm. Who's more advanced in this area? Ultimately, it had to investigate integration with that group.

One thing that it had to be concerned about was the level of ERM integration. Kara mentioned the silo approach versus the holistic approach. The organization really was committed to making sure that it would have a collective policy in this area.

With that I'll give it to John who has some interesting insights as to ERM in his own organization.

MR. JOHN W.C. STARK: I work for Anthem Health Plans of Virginia. We are part of WellPoint, but we do business as Anthem. Exposure to risk can happen very quickly, and we're going to get together and try to manage that risk in a bit. Think of things like that as you go through this presentation and just kind of go through your daily activities.

One thing I want to talk about before we even start talking about setting up an ERM program is why you want to set it up. This is really important. Depending on the reasons, the implementation can go very smoothly or it can be just very rocky. The operation can produce tangible results or it will become just another report that you look at and throw away, file, ignore or whatever you do with useless information. So we'll talk a little bit about the whys. In order to do that, I want to talk about Newton's second law of corporate motion. It states that a company will continue on its current trajectory until some force is applied to cause a change in its trajectory.

Here, trajectory is defined as business plan. We all work in corporate America. We all have budgets, forecast business plans and talk about whether or not we'll meet them. Now what kinds of forces can change your business plan? We've seen numerous examples throughout the last four or five years, such as Y2K, HIPAA and Sarbanes-Oxley. These are things that will just knock your business plan right out of kilter. We've seen quite a few examples. I'll talk about some forces that would make a company interested in adopting an ERM program.

Let's talk about the types of forces. First of all, you can have internal forces, such as an enlightened CEO who's been to a seminar like this and embraced ERM, thinks it's the best thing he or she has ever seen and decides that the company will put it in place. This is wonderful. It's a very top-down approach when everybody is committed. Then, you can have a board that's gotten very skittish. I mean all of a sudden you have people signing Sarbanes-Oxley documents, jail sentences and things like that. They realize they don't know much about this ERM stuff, but decide they'd better put it in place, because this looks like a good thing for the company and could probably protect them so their golden years won't be spent worrying about going to jail.

Now there are other, more external areas also, such as regulatory bodies. The NAIC has what's called a risk-focused surveillance framework. That looks a lot like ERM. When they do their audit they will come to your company and use that framework to try to get a sense of how you manage your risk. This is not just a theory; this is actually happening in Virginia. I used the health risk mapping during part of this audit as part of how we manage risk. So it's coming, and it can be very unnerving because then you have to start talking about your processes. It's very illuminating as well.

Rating agencies are another external area. Our own Dave Ingram is working at a rating agency now. I get the sense that all of a sudden ERM is going to become a part of the rating agency's assessment of a company. So there will get to be a point

where your public companies are on conference calls. Do you have an ERM program? If not, why not? Those are going to get very interesting.

Customers and consultants are other external forces. When you get requests for proposals for large groups you'll probably get questions about whether or not you have an ERM program. And finally, you have competition as an external force. One of these days somebody's health carrier is going to come out with their ERM program, create lots of sizzle and publicize it, and all of a sudden there's going to be a lot of catch-up. So in terms of forces and in terms of what's beneficial and what's not, I think that the internal forces and the competitive forces are probably the most positive ones to induce a company to start an ERM program. If ERM is viewed as compliance, there is very little enthusiasm. Again, it's just going to be another report.

Now let's talk about commitment. It's vital. I mean you have to have it. If senior management has bought into this we can skip this whole step. However, if they haven't bought into it, it can be a fairly simple sale or it can just be torturous. It can be agony trying to convince people. Let's talk about some of the things that you need to address when you sell.

I've heard many questions. We're an insurance company; don't we do this already? What's the return on investment (ROI)? Am I going to have to staff a whole new department with a chief risk officer (CRO) with a seven-figure salary and a whole staff? Those are things you have to talk about and have reasonable responses for. You have to sell it and you have to have senior management buying it. It's just critical. Senior management buying will provide direction. And it makes ERM part of people's jobs. I found out no matter how good an idea is, if it's not part of your job, what you do everyday and what your paycheck reflects, things just kind of drift away.

If senior management doesn't buy in, you can always try a little grass roots effort. If you do that, you want a real committed core group. You can try to put it in place, maybe, at the business unit level, product level or different levels of the company. You can use this to show senior management the value. Now if you don't have a committed core group, they won't see the value; they'll be busy. The other downside is if this doesn't succeed, then this core group will probably be naysayers when senior management finally does get around to doing it.

Now you need to get things off the ground. Sometimes it's not that easy. You need a common definition of ERM. I don't mean a common definition that we all understand, but a common definition within the company. So that's really important. I've been in meetings where we're talking about the same words, and clearly they have different meanings to the provider folks and the actuaries. So this is really important.

There are organizational issues. How does your company operate? Do you have one

person that's responsible for an area? If so, you'd want a CRO. Or are you run by committee? Then you probably have a risk committee. Maybe you have a combination of both. Then you get into some real interesting organizational issues. Does the CRO report to the chief actuary, CFO or CEO? And in the case of a committee, who's sitting on the committee and who chairs it? All of a sudden you can get into some very interesting turf battles. You've probably never seen that. You don't have experience of that. And this gets into corporate culture.

Is your company tolerant of mistakes? Do you have a group that gets together and talk about problems you're facing and how to resolve them in a very open atmosphere? People should feel very comfortable in saying, "I have a problem in my area. Here's how I'm going to solve it and I need help from others." Or, do you have a culture where if there's an error people will do anything and everything to fix it before they have to talk about it. I mean if you have one of those cultures, ERM is going to be very difficult to put in place. You're going to have to deal with some of those issues first. And, like I said before, you're going to have some turf issues. Because when you start cutting across different departments people are going to feel like either you're kind of checking up on them or taking away something. And that's not the idea. This is very touchy feely, and we're talking about feelings now.

So, what do you need to do next to get this off the ground? You must identify your risk preferences. Are you a very conservative solid insurance company? Do you like to be really judicious in your risks or are you more of a risk-seeking company? Do you like to get into new markets or try new things? Do you like to be a leader? There is no right answer to this. It's really how your company operates. What do you want? This is stating the obvious, but it's important.

The next thing you need to do is specify risk tolerances. Suppose you're a risk-seeking company, how far do you go before you stop? And you can specify these by for the overall company, by product line or business unit. Again, you should be stepping out and saying, "I'm risk-seeking and here are my tolerances." That really helps everybody in the organization know when to step forward and say, "We've gone too far one way or we need to augment another line of business."

Now we've talked about the COSO document, and I just want to interject something here. I've seen that, and it's very structured. Hopefully the idea you're getting from some of these conversations is risk is not structured but rather very fluid. The minute you put a rigid structure in place, you're going to miss risk because risk cuts across all areas. It's a very slippery concept. So just be careful when you think about a checklist approach.

Now the next thing is to develop a risk policy. Your risk preferences and your risk tolerances ought to combine to develop a coherent risk policy. As you've heard before, this is not a static thing. It should be reviewed periodically, such as once a year or something like that. You have changes in law, markets and such, so this is

not a one-time thing. This is an evolving thing.

Now what risks are we talking about? All of them. You've heard us all say you don't have to manage all risks, but you need to identify them. The ones that I think that Rajeev or Kara referred to as the ones that people say won't happen are the most dangerous risks of all. Because that means you're ignoring them. How many times have you been at a meeting and you brought up something that the marketing or the finance guys say, "Oh, that will never happen. We're not going to worry about that." Two days later, that's my benchmark, all of a sudden it happens. And why? Either somebody just couldn't imagine it or they just didn't want to mess with it. So they dismiss it and move on to more important stuff. These are things to consider.

Now in identifying all of these risks you want to put together a risk-mapping document. Also, during this categorization you want to take into account your risk management tools, underwriting policies, medical management policies, reinsurance and anything you use to manage these risks. You need clear definitions of these risks. These are critical. I've been in meetings where we've talked about certain things and the words are the same, but the meanings are different. If you get into risk management, and you're talking across whole different divisions of the company, if your definitions aren't clear you can end up not managing the risk you intended to. So a lot of it is about communication and some standardization.

Now the risk mapping is the tool. You know once you get to a certain point you have to actually do some work. The risk mapping is a tool that you can use. The document Rajeev was talking about really is a template. It is not meant to apply to every company; it's meant to be a starting point, because some of the risks that are identified there may be very important for you and some may not. There may be some risks that aren't there and these can be because of markets, culture or you name it.

Now the final thing you have to do is prioritize. This is where things get a little more interesting. You'll have a big list, and you want to look at the ones that are high up there. But you want to keep the ones that aren't, because as things change, they can rise up. So it's really all about managing resources and keeping your eye on things.

Now senior management is brought in and you've changed your culture. Human Resources has trained all of you to be sensitive and caring and talk about problems and things like that. You've identified risks. After these things, what do you get to do next? Measure it. How do you measure? If you can't measure, you can't manage it. However, not everything has to be or can be measured with the same degree of accuracy. If we can't measure it in excruciating detail, it shouldn't be there. Right? But what happens is if you try to get too detailed and you try to take things and put more precision on them than already exists? You're going to lose sight of what you're trying to do, which is to manage risk. So that's something to keep in mind.

What should a measurement system do and what should it not? It shouldn't be overly complex. It should be easily understood and appropriate for the risk. And it should be able to pick up a perfect storm. This is a situation where you have several risks that occur all at once. Individually those risks can be manageable and may not even hit your radar screen, but the confluence of those risks can really damage your company. It can be because they all hit one department or they hit at the wrong time, but your measurement system should be able to pick this kind of thing up.

Finally it should produce results you can act on. This is not a passive process; this is all about activities.

As for the complexity of it, be easy to understand. Remember you're going to be dealing with people all across the company. When you go into meetings to present actuarial results you don't want to see eyes roll back because of the formulas and numbers. You don't want to have that kind of reception.

Let's talk about a few examples, as can be seen in Stark Slide 1, page 19. For morbidity, the scale is continuous. I mean this is our bread and butter. We can measure any kind of trend you want. We can tell you why it's good or why it's not. We can look at claims costs. This is one where you really can get detailed and you want to get detailed. Reputational risk is a very interesting one, and this has really gotten a lot of play recently. You probably will have a discreet kind of scale, such as high, medium or low; up or down; or on or off. It doesn't matter. This is more for awareness. I've listed a couple of indicators. Now when you think about reputational risk, what have we seen recently? Does everybody remember autologous bone marrow transplant (ABMT) for breast cancer? We all call it experimental coverage. That did not work at all. We got roasted and pressed. A lot of work was done on that. In Virginia, there was some legislation passed to require that we offer a rider of some sort.

Physician incentives is a good example. Remember those? When managed care first came in, we had financial incentives. While there was good intention, there was poor execution, bad press and even a Supreme Court case. There was a certain managed care company that publicized that they wouldn't require referrals. Later it came out that that wasn't quite it. I mean something as simple as that can put the spotlight on you. Everybody loves to jump on the bandwagon after that.

Moving on, the next one is competitive. It's a more discrete kind of scale. It's probably a little more detailed, because you're in touch with your markets all the time. You're pricing products; you have the sales folks and the marketing folks talking to you. So even though the scale is discrete, there are more indicators there for you to use. We've gotten a program in place. We've set up our policy, and we have our measurement tools, so it's time to have some fun. Now we start monitoring. This is where things really get interesting.

One thing you want to do is look at the changes in the risk. Because this is very dynamic, the other thing you want to do is periodically look at your risk status and compare it to your risk policy. Have you gone too far? Does that mean you need to pull back or have there been enough changes where it's time to redo your risk policy? Now don't be afraid to tinker with this. I mean in the first six to 12 months you're probably going to change measurements. You do all kinds of things, because this is kind of a fluid process. Again, review and revise priorities, and then act. This is important. Think about trend. You'll see trend is about to change, but when do you act? Do you wait a month and see if that's a real change? Do you wait two months or do you act right then? It's very difficult. You don't know whether you've seen an inflection point or just a blip. I heard one quote: "A bad decision on Monday is better than no decision by Friday." And there's a lot of truth to that.

How can you get involved? Do you want to be involved? The answer hopefully is yes. What we have seen is if we don't get involved, there are lots of other people that want to be—accountants, other risk managers and MBAs. Many people are starting to stake out territory. Learn about it. This session is a good start, but by now there are lots of papers, books, and other good information out there. A couple of years ago, there was not quite as much.

If you've been at your company a long time you probably do have a sense of risks and the risk culture at your company. If not, start learning about it. Think outside your silo. And I think actuaries do this. I think we do it very well. I think we just need to publicize it more and make people aware of how valuable it is and not be worried that the actuaries are checking up on them, which we do anyway. It just makes it more palatable this way.

Communication skills are key for ERM. Listen, and don't be passive. Get out there and actually start talking to people. Tell them what you think. Give them a sense of what risks we can manage. What risks are dangerous? Be proactive. That's one of the things that has come out in terms of what actuaries should be doing to get into other industries and to get more visible.

I have a few final thoughts. I think ERM does bring an added dimension to how we manage risk. As actuaries, I think we look at the entire enterprise. When I first came to Blue Cross/Blue Shield of Virginia, I remember somebody said, "Well, why do you need to know benefits to price a product? Just give us a rate and we'll deal with that." I also remember going to certain meetings and having people say, "Why are the actuaries here when we're talking about operations?" Those inventory levels do mean something at times. And things have gotten a lot better. We've worked together, and actuaries had not really been a fixture at my company when I first got there. They had just started the actuarial department. So it's been a very interesting evolution.

We alluded to this earlier and it is critical that incentives work. I think everybody has seen this with commissions and provider incentives. If you tell somebody you're

going to give them money, they'll do it. The only problem is you might not have figured out all the different implications. In ERM, this is going to be critical in trying to manage risk and make sure people are doing the right thing.

Pricing and forecasting should reflect a company's risk policy. I think having a risk policy will make pricing and forecasting discussions easier. How many of you put together budgets, send them to corporate and have corporate say, "Hey, that looks great; we'll go with that." It never happens. They send it back and you need to contribute more to the corporate coffers. If you have a risk policy, the conversations will get better because then you can talk about the things you have to do in order to increase your contribution and if they are within your policy. If yes, that's fine. If no, then you can say, "Here are the risks we're taking and here's how far outside we're going." Then you can ask, "Is this acceptable to the corporation?"

Now the final thing I will say is don't wait until you have to. If you do that, you will probably slam it in, it won't work and it will be just another report. So the rating agencies and the regulators are already looking at this, and if nothing else, that should spur you at least to think a bit.

MR. WILLIAM C. CUTLIP: John, you suggested that actuaries should think outside of the silo. Is that because you perceive us as farmers or ballistic missiles?

MR. STARK: Probably as one of the more dangerous weapons in the insurance arsenal. We have to look across the enterprise to do our jobs when you think of pricing and reserving. You have to be aware of what's going on. I think the actuarial silo is more how we approach certain problems. And it's with a very detailed, in-depth, complex analysis. I think some of them you can just give a fairly quick assessment. Go out on a limb. You need to assess the risk. If somebody asks you for an opinion, is this a big deal? And if you can give some thoughtful responses without a lot of analysis, it is going to move things ahead.

MR. CUTLIP: Rajeev, on the integrated approach, the case study example that you presented had 12 categories. Well, actually I found four more that I would suggest that the company should have used. That has to do with the stakeholders. What struck me was that what's here is more an internal focus. What is it that we are doing and what should we do better and how can we affect things?

The other four items to me would expand this. Being an integral part of it would be to talk about customers, buyers, insurers and the insureds themselves. What is it that they need? What is it that they want? What external factors might impact them to change those needs and wants? How can we be ready to respond to those? A second stakeholder would be providers. We're talking about doctors, hospitals, nurses, medical technicians and ambulance companies both on the ground and in the air. What external factors could impact on how we relate to med schools, and what benefits we provide and how would that help? A third stakeholder would be

suppliers, such as the drug companies and manufacturers of technical equipment, such as MRIs. Again, what are the external factors on them? And then the last one is the investors. The factors there would be money that they have available and what kind of trust levels we can make sure that we establish. What might affect that trust with our investors? It seems to me that bringing in that outside focus and having somebody in the organization who's standing on the outside looking in would really help from the holistic standpoint.

MR. CHRIS L. SIPES: I think the politics that John alluded to do exist very strongly in a lot of corporations. I guess one of the areas that didn't get brought up is when the company already has a corporate planning or people responsible for a business plan that's being put together every year. Or maybe they develop a three-year or five-year projection that's supposed to be addressing a lot of these issues, and yet they're not doing it in a true risk context. I'd like to hear some comment back as to how you deal with that already being in place and people responsible for doing that politically.

MR. STARK: When you start doing risk mappings and start taking inventory of risk and risk management tools, one of the things you'll do is look at different parts of the company and see what they contribute to risk and risk management. So politically you should be able to identify those folks and in some way decide how they contribute to the risk management. They would probably be part of any planning session. And then, are you just projecting forward or are you managing risk? And trust me, this is very delicate. It will feel like you're trying to take something away or step on their toes. And that is one reason why commitment from senior management is vital. Hopefully, when those little turf battles occur, you can see some senior level person to basically say, "Enough."

Just because you ask questions doesn't mean that we're going to recruit you. That was not an effort to limit questions. We have better ways to limit questions.

FROM THE FLOOR: ERM got started a couple of years ago in our organization. Senior management has a very strong interest in it. However, in reality, the key issues we are facing relate to data. That was mentioned a couple of times in this session. We have a lot of the data, but we don't have enough confidence in the data we gathered. Also we don't have confidence in the runover data to measure the risks. I think you've gone through this kind of process, so how do you deal with the data issues for better measurement of the risk?

MR. STARK: One of the things that will occur during any kind of assessment is deciding what data you need. Because some of the data that you have to price products will be the data that you need and some won't. When you start talking about other aspects like reputational risks and things like that, there's no data. It's less data analysis and more monitoring. ERM with data issues like you talked about would probably take a little longer to put in place. Because once you identify the data that you need, then you have to collect it. But that doesn't mean you still can't

monitor, and at least make some judgments. But data, depending on the risk that you're trying to manage, can be a very big deal. And when I first came to my company a lot of the data and systems were there not to do analysis, but to pay claims. So then we had to set up databases and put procedures in place to use that data to analyze. So yeah, that is a big problem.

MR. DUTT: You mentioned not enough credible data, but identifying the data that's required is an important step as compared to misinterpreting the data that you do have. As John mentioned once it's identified there is some time required for the collection. But at least then the wheels are in motion to ultimately to be able to implement such a program.

FROM THE FLOOR: That's reputational risk?

MR. STARK: On reputational risk there is data available. I'll bet every one of your companies has a clipping service. Someone is tracking every article about you. And if you can just have the people who are tracking that give it a score of positive, negative or neutral you now have data to track your reputation.

MR. DUTT: I said there's not a lot of data, but there is. However, it's also unique. It's very situational. So if you collected data points on different companies and the problems they had with reputation, it would be situational in the terms of the culture and the organization. What led to it? And are there similarities? You get to the point where it's probably so much work trying to figure out what happened that just the monitoring is the important thing. You want to be seeing what they're saying and how often they're saying it. If you see more clippings coming out about your company, something is up.