GH SPC Model Solutions
Spring 2018

1. **Learning Objectives:**
4. The candidate will understand and apply risk adjustment in the context of predictive modeling.

Learning Outcomes:
(4a) Develop and evaluate risk adjustments based on commonly used clinical data and grouping methods.

(4c) Describe typical predictive modeling techniques.

(4d) Evaluate the appropriateness of each technique.

Sources:
GHC-809-15: The HHS-HCC Risk Adjustment Model for Individual and Small Group Markets under the Affordable Care Act pp. E3-E26.

HHS-Operated Risk Adjustment Methodology Meeting Discussion Paper – Ch 4 Risk Adjustment Model Improvements pp. 40-69.

Commentary on Question:
This question tested the ability of candidates to understand risk adjustment in the ACA commercial market, specifically regarding the nuances of adding pharmacy to the calculation. The intent was to walk candidates through considerations of adding pharmacy, potential models to be used, how it compares to another risk adjustment methodology, and finally a calculation. Candidates were expected to demonstrate their knowledge by going into detail to support their position rather than reciting lists, which fails to provide adequate comprehension of the topic.

Solution:
(a) Explain the benefits and concerns of adding Prescription Drug utilization to the HHS-HCC Risk Adjustment Model.

Commentary on Question:
Many candidates were able to identify the majority of benefits and concerns; however some candidates could have spent more time elaborating than simply compiling a list to gain full credit.

1. Continued

Benefits:

Imputing Missing Diagnoses: Fill in the gaps where diagnoses may be missing due to under-recording in medical claims or encounter data

Severity Indicator for a Specific Diagnosis: Offers a more complete picture of the severity of illness

More Timely, Standardized Data: Drug data can be available more quickly than diagnoses from medical claims

- Is often more complete, and is often easier to access
- Prescription drug data are standardized and do not vary with provider coding patterns for diagnoses

Mitigates the Financial Disincentive to Prescribe Expensive Medications: Compensate plans that cover high-cost medications for its enrollees

- Less restriction of access to high-cost medications
- Encourage plans to include more drugs in their formularies

Concerns:

Gaming, Perverse Incentives, and Discretionary Prescribing: Prescribing a drug in order to trigger a higher payment from a risk adjustment model

- Models are susceptible when inexpensive drugs are included in therapeutic classes that are statistically linked to high total medical expenditures
- Basing risk adjustment on drug utilization will tend to bias health plans towards drug rather than non-drug treatments

Sensitivity of Risk Adjustment to Variations in Prescription Drug Utilization: Incorporating drug utilization makes risk adjustment sensitive to variations in drug utilization patterns

- Lower prescribing rates incorrectly appear to have healthier populations, in turn paying higher risk charges or receive lower risk payments

Added Administrative Burden, Complexity, and Costs: Additional data requirements increase the administrative burden associated with calibrating and applying the model.

Availability of Outpatient Drug Data Only: For a severity model, the omission of drugs provided in a hospital setting may introduce bias

- Hospitalized patients may appear to be less severely ill, because their drug utilization is not included in the model

Multiple Indicators for Most Drugs: The lack of clear, one-to-one association between most drug classes and diagnoses makes the development of a hybrid risk adjustment model that incorporates and integrates drug and diagnosis risk markers challenging

1. Continued

(b) Describe for each of the four models the:

(i) Incentives for drug utilization, and

(ii) Sensitivity to reporting of associated diagnoses.

Commentary on Question:
There was a lot of inconsistency in how candidates answered this question. A lot of candidates spent time discussing the models but failed to mention how that would impact incentives for drug utilization or sensitivity to reporting associated diagnoses. Further, some candidates were not clear in explaining the magnitude of incentives for drug utilization and didn't definitively provide direction, in these instance points were not awarded.

Imputation Only Model

Incentives: Least or weakest incentive

Sensitivity: Not sensitive. When drug utilization is present, incremental predicted costs are not affected by associated diagnosis reporting.

Rx Dominant Model

Incentives: Strongest incentive for providers to potentially over-prescribe

Sensitivity: Not sensitive. When drug utilization is present, incremental predicted costs are not affected by associated diagnosis reporting.

Flexible Hybrid Model

Incentives: Strongest along with Rx Dominant (predicted costs increases the most with drug utilization in these models)

Sensitivity: Sensitive to the reporting of associated diagnosis (can lead to lower predicted incremental cost when a diagnosis is reported than when it is not reported).

Severity Only Model

Incentives: Least or weakest incentive along with Imputation Only

Sensitivity: Sensitive to the reporting of diagnosis (because the higher cost associated with a drug-diagnosis pair is only recognized when the diagnosis is reported).

1. Continued

(c) The CMS-HCCs had to be adapted into the HHS-HCC for ACA risk adjustment because of prediction year, population, and type of spending.

    (i)   Describe how the CMS-HCC handles each of these items, and reasons why the HHS-HCCs model is better for the ACA population.

    (ii)   Explain why a concurrent model is used for the Individual and Small Group ACA markets instead of the prospective model used for Medicare Advantage.

Commentary on Question:
The vast majority of candidates were able to identify how the HHS and CMS models differed for each of the three components; however there was a separation of candidates identifying the reasoning for the differences. Many candidates did not receive full credit in this section as more time could have been spent by candidates identifying the reasons the HSS model better fit the ACA population. For part (ii) many candidates received at least partial credit, however again could have elaborated further to receive full credit.

(i)

Prediction Year

Description: CMS-HCC uses base year diagnoses and demographic information to predict next year's spending. HHS-HCC uses current year diagnoses and demographics to predict the current year's spending.

Reason: Medical conditions may have different implications in terms of current year costs and future costs, selection of HCCs should reflect these differences.

Population

Description: CMS-HCCs were developed using data from the aged (age >= 65) and disabled (age <= 65) Medicare populations. Some conditions (e.g. pregnancy) have an extremely low sample size in the Medicare population.

Reason: HCCs need to better reflect conditions and cost patterns for adult, child, and infant subpopulations.

Type of Spending

Description: CMS-HCCs are configured to predict non-drug medical spending. HHS-HCCs predict the sum of medical and drug spending.

Reason: CMS-HCCs predict Medicare provider payments while the HHS-HCCs predict commercial insurance payments.

1. Continued

    (ii)   For implementation in 2014, prior year (2013) diagnosis data will not be available.
Unlike Medicare, people may move in and out of enrollment in the individual and small group markets, so prior year diagnostic data will not be available for all enrollees even after 2014.

(d)

    (i)   Calculate the plan average Plan Liability Risk Score (PLRS) for 2016 based on the three enrollees' information, assuming a Silver model level. Show your work.

    (ii)   Describe why the plan average PLRS would decrease if all three enrollees were instead on a Bronze plan. Justify your answer.

Commentary on Question:
Part (i) of the question was answered correctly by the majority of candidates. Some candidates incorrectly multiplied the age/gender and condition factors instead of adding when calculating the Predicted Relative Plan Liability Expenditure. Also, some credit was lost when candidates would not appropriately take the number of months weighted average to find the Plan Average PLRS (instead, averaging the scores or taking some other averaging approach). Part (ii) seemed to receive little attention from a portion of candidates which only allowed for partial credit to be granted. Other candidates could have more thoroughly explained the reasoning behind the reduction in PLRS rather than simply stating the AV is lower for bronze plans versus silver plans.

Enrollee 1 Predicted Relative Plan Liability Expenditures = **0.37 + 0.9 = 1.27**

Enrollee 1 PLRS = **1.27 x 1.0 = 1.27**

Enrollee 2 Predicted Relative Plan Liability Expenditures = **0.69 + 3.1 = 3.79**

Enrollee 2 PLRS = **3.79 x 1.1 = 4.169**

Enrollee 3 Predicted Relative Plan Liability Expenditures = **0.7 + 1.2 + 3.6 = 5.5**

Enrollee 3 PLRS = **5.5 x 1.0 = 5.5**

Enrollee 1 # of Months in 2016 = 12, Enrollee 2 = 6, Enrollee 3 = 8
Plan Average PLRS = **(1.27 x 12 + 4.169 x 6 + 5.5 x 8) / (12 + 6 + 8) = 3.241**

1. **Continued**

    (ii)   The plan's liability for their lower expenditures is greatly reduced by the increase in the deductible across the metal level plans.

In contrast, much of the spending for persons with HCCs, especially the more expensive ones, occurs above the plan deductible and even above the plan out-of-pocket maximum, and thus is less affected by the change in cost sharing when moving across metal levels.

Plans will incur a significant liability for very sick people even if they have higher lower-end cost sharing; but their proportionate liability for relatively healthy people will be much lower.

2. **Learning Objectives:**
2. The candidate will understand and evaluate the risk associated with health insurance and plan sponsorship and recommend strategies for mitigating the risk.

Learning Outcomes:
(2a) Evaluate an enterprise risk management (ERM) system, including
- Describing the components on an ERM program.
- Discussing ERM risks and risks specific to the health insurance industry.
- Describing and recommending methods used to analyze, evaluate and mitigate the risks.

Sources:
Chapter 42, Group Insurance 7th edition (Skwires), page 754 – 764

Commentary on Question:
Commentary listed underneath question component.

Solution:
(a) Describe the factors that obscure emerging risk in an Enterprise Risk Management (ERM) program.

Commentary on Question:
Many candidates listed at least one of the five factors. In order to receive full credit, candidates were expected to describe the factors instead of simply list them. A sample description of each factor is shown above, however other descriptions were accepted as appropriate.

A. Uncertain Future
- The future is likely to be different than expected.
B. Poor Information
- Emerging risk can only be managed if complete, accurate, relevant, and timely information about current company conditions gets to the appropriate decision-makers.
- There may be too much information, making it difficult to identify what is relevant and important for communication to management.
C. Poor Understanding
- Even when the right information gets to the right person, it may not always be possible to understand its meaning.
- The conceptual factor is the next barrier faced when trying to make sense of complex organizations operating in a complex world.

2. **Continued**

        D. Poor Judgment
- The judgment or leadership factor may be the most difficult barrier to overcome in addressing emerging risk, since the actions taken may precipitate the very risks one seeks to avoid.
- Judgment errors may occur when the organization lacks a culture of dissent, or when there is little diversity of opinion.

        E. Management Incentives
- Financial rewards given to corporate executives often have significant upside potential when the company does well, but limited downside risk to the executives when the company does poorly. This incentive arrangement may encourage corporate managers to be overly aggressive in pursuing business opportunities, ignoring the organization's ability to sustain future adverse conditions.

(b)   State one sample question for each consideration that helps describe the business system and its enviornment for each factor identified in part (a).

Commentary on Question:
Many candidates answered with one question under each of the five factors and missed the fact that there were multiple considerations within each factor.

While we've listed many potential questions above, candidates were able to receive full credit as long as they listed one question from multiple considerations under each factor.

A. Uncertain Future

  Stressed environments:
  How will those situations that cause stress affect the organization's balance sheet, income statement, and cash flow?

  Primary objectives:
  What are the key assumptions that will happen in the future?
  What are the key variables?
  What needs to happen in the short term and long term for corporate goals to be met?
  What else can happen in the future and what would the consequences be for the organization

2.   Continued

Strengths and weaknesses:

What are the organization's current core competencies in terms of people, process, and technology?

What will be required over the next ten years?

How does the organization compare to its main insurance (or other) competitors?

Pricing Assumptions:

What are the primary pricing assumptions by line of business and how can they vary?

Is price competition increasing, declining or remaining stable?

What lines of business are the primary sources of profitability for the organization?

If future enrollment in the lines of business changes size relative to each other, what is the effect on aggregate profits?

Major initiatives:

What are major business initiatives and their critical factors required for success?

Is a strong project management process in place for each initiative?

Investments:

What is the effect on cash flow and investments of a market downturn or rising interest rates?

A.   <u>Poor Information</u>

Standard Reporting:

What information is needed to properly monitor and manage the business system?

Does current reporting include information needed?

Will the information collected indicate if the system is reaching critical stress points?

If not, what information should be collected for this purpose?

Data Analytics:

Is there a centralized data warehouse?

What are the strengths and weaknesses of a data warehouse?

What analytic capabilities are available for monitoring key utilization and cost measures, claim trend, and financial performance?

What information and analytics are required by patients, group accounts, and health service providers?

2. **Continued**

Performance Indicators:

What are important performance measures that indicate whether milestones and goals are being achieved?

Are performance indicators routinely monitored?

Is there an effective process for communicating important information to key decision-makers?

What is that process for communicating important information to key decision makers?

Competitive information and analysis:

Is competitive data being collected and analyzed?

What information about the competitive environment *should be* collected and analyzed?

Communication:

How is critical information communicated to management?

A. <u>Poor Understanding</u>

Operations:

How is operational performance measured and monitored?

Where in the system is management's understanding of process superficial?

Where do internal and external business units interact?

What feedback loops exist in the system?

Are there correlations among business units?

Are these interactions important to performance and goal achievement?

How do the interactions change over time?

How will each operational unit perform under stressed conditions?

Environment:

What market and economic forces are driving changes in the industry?

How will economic forces impact the organization?

What technological forces are driving changes in the industry and how does this relate to the organization's core competencies?

Subsidiaries:

What services are provided by any subsidiaries or divisions that operate autonomously?

What is the organization's visibility to subsidiaries' operations?

Are subsidiaries or autonomous divisions geographically separated from the parent organization?

Are internal controls and limits of authority in place and followed at subsidiaries?

2. Continued

Pricing and forecasting models:

Are the forecast and risk measurement models (for example actuarial models) relied upon for making decisions?

Are the forecasts of future performance clearly understood?

What are the primary formulas and key assumptions?

Have complex models been peer reviewed and tested?

Are models updated to reflect emerging experience and current knowledge of the environment?

Compliance:

Who has oversight over compliance with state and federal insurance laws and regulations?

Describe the process of monitoring and ensuring the organization complies with new regulations.

How will regulatory change affect the organization?

Major change initiatives:

How does the organization manage complex corporate change?

What are the descriptions of the reasons for success or failure of prior initiatives?

A. Poor Judgment

Forward Thinking/Strategic Planning:

What is the company's strategic planning process?

What are the major challenges facing the organization over the next five years?

How does the organization need to change to meet challenges?

What contingency plans are in place if the strategic environment changes?

Decision-making:

What is the decision-making process for major initiatives?

What are the limits of authority for committing the organization to a business plan?

Is there effective Board oversight?

What conditions might cause management to bypass the normal decision making process?

Evaluation of alternatives:

Are alternatives routinely evaluated prior to major corporate decisions?

What is the process for evaluating alternatives?

Dissent:

Is there an open culture for dissent and discussion of risk?

Are there past examples of poor results from major decisions?

How was that decision process similar or different from normal?

2. Continued

A. <u>Management Incentives</u>

Incentives:

What is the management incentives formula?

What is the expected effect of management incentives on the decision-making process?

Are management incentives aligned with corporate mission and goals, and with other stakeholders?

What conditions might change the effect management incentives have on the decision-making process?

Is the management incentive program routinely reviewed and updated by the Board?

Risk appetite and tolerance:

Is there a clear definition of risk appetite and risk tolerance consistent with company goals and available capital?

Are these limits adhered to?

Ethics:

Is there a stated code of ethical conduct for the organization?

Are there consistent, meaningful, and enforceable penalties for violating the ethical code?

What situations might put pressure on ethical conduct?

3. **Learning Objectives:**
1.   The candidate will understand pricing, risk management, and reserving for individual long duration health contracts such as Disability Income, Long Term Care, Critical Illness, and Medicare Supplement.

Learning Outcomes:
(1b)   Understand utilize experience studies in setting assumptions for long-duration contracts.

Sources:
GHS-102-14: Pricing Critical Illness Insurance in Canada

GHS-103-14: Product Design of Critical Illness Insurance in Canada

ASOP #7: Analysis of Life, Health, or Property / Casualty Insurer Cash Flows

Commentary on Question:
Commentary listed underneath question component.

Solution:
(a)
    (i)   Describe the main approaches to developing CII premium rates.

    (ii)   Recommend a pricing strategy. Justify your recommendation.

Commentary on Question:
Candidates used information from other sources, while legitimate for general pricing, was not what was specific enough for CI. Partial Credit was given for mentioning Cost and Profit assumptions because they fit in the general pricing information given by a majority of candidates.

    (i)
1. Commercial Product Modeling Software
    a. This is known as "costing", the calculation of premium rates based on related costs
    b. Cost assumptions are inputted
    c. Profit assumption is inputted
2. Commercial Premium Rate Quotation Service (CPRQS)
    a. Use quotation service along with criteria to position premium to competitors to obtain target premium rates
    b. CPRQS is true "pricing" – premium rates are set to achieve the desired level of sales

3. **Continued**

    (ii)
        1. Both approaches should be used concurrently
          a. Good balance between financial objectives (costing) and market competitiveness (pricing) is found
          b. Very timing consuming with actuary focusing on only one premium structure, then working out the remaining breakouts

(b)   Describe considerations when purchasing reinsurance for CII.

Commentary on Question:
Candidates did not do well on this question. Most of the total points awarded were given for mentioning the expertise of the reinsurer. There was not much mention of anything else.

1. Most CII business is reinsured; reinsurer's pricing should be reflected in the CII pricing process
2. Choose reinsurer based on pricing, services, and expertise
3. If reinsurer's pricing assumptions are aggressive premium rates will be lower than otherwise possible, and capital for new business reduced
4. Reinsuring a higher percentage of each policy to maximizes financial benefits to the company and reduces financial burden

(c)

    (i)   Describe the policy feature that causes the large negative loss of cash.

    (ii)   Describe a reason why this policy feature was included.

    (iii)   Describe challenges in setting premium rates for this policy feature.

Commentary on Question:
Many candidates were confused by the graph thinking it was a critical illness claim at year ten instead of a return of premium.

    (i)
        1. This is an optional ROPX, which provides for the return of all eligible premiums paid at the expiry date of the policy if then in force, many surrenders would happen at duration 10 for a 10-year renewable term product. There are also RPOD (return on death) and ROPS (return on surrender).
        2. One of the popular plan options in Canada is a 10-year renewable term to age 75 policy, many surrenders would happen at duration 10

3. **Continued**

      (ii)
1. Rider is inexpensive at younger issues, more expensive at older issue ages
2. Partial benefits received reduce the ROP benefits
3. Policyholders react positively to being covered for critical illness and having all premiums returned to them at some future date

      (iii)
1. Long term product
2. Lapse and interest rate assumptions are critical
3. Fewer lapses result in lower profits
4. Lower interest rates result in lower profits

(d) Recommend if a cash flow test should be completed for the CII product shown in the graph as referenced under ASOP #7. Justify your answer.

Commentary on Question:
While many candidates received credit for listing the ASOP #7 references, justifications came up short. Justification credit was not given for simply writing "yes cash flow testing is needed due to ASOP #7" and then listing the ASOP recommendations. The product needed to be referenced in the justifications e.g. "cash flows extend to at least ten years".

1. Material asset risks
   a. Unknown in this case
2. Liabilities with cash flows far out in the future
   a. Applies because cash flows extend to at least ten years
3. New or rapidly growing line of business
   a. Applies because you are pricing a new product
4. Options are offered to policyholders increasing the likelihood of anti-selection
   a. Applies because the policyholder can renew in ten years

(e) Your Chief Financial Officer (CFO) wants to invest reserves in 30-year bonds in order to achieve a higher yield.

      (i) Identify and describe appropriate considerations an actuary should consider as part of the CFO's strategy.

      (ii) Critique the CFO's investment strategy. Justify your answer.

3. Continued

Commentary on Question:
Most candidates realized the mismatch between 30 year bonds and ten year liability cash flows is ill advised. More points were scored in asset characteristics than in liabilities.

(i) **Asset Characteristic Considerations**
1. Sensitivity to economic factors, such as interest rates, equity, or other market returns, and inflation rates on the insurer's cash flows
2. The impact on cash flow associated with asset quality as it relates to the risk of a delay in asset cash flows being collected, asset default, or other financial nonperformance
3. The associated costs of maintaining the assets or of converting the assets into cash when necessary, liquidity
4. Strategy regarding the sale of assets prior to maturity or capital requirements

Investment Strategy Considerations
1. Strategy regarding the sale of assets with a declining market value
2. Strategy for the investment of future positive or negative cash flows

(ii)
1. The 30-year duration of the bond doesn't match timing of the majority of the cash flows at 10 years
2. There are costs associated with the sale of the asset prior to maturity as described in the reasons earlier

4.

Learning Objectives:
3.   The candidate will understand an actuarial appraisal

Learning Outcomes:
(3c)   Describe risks associated with interpreting an actuarial appraisal and an embedded value.

(3d)   Describe principles of applicable Actuarial Standards of Practice.

Sources:
GHS-112-14 Simple Embedded Value Sample and ASOP 19

Commentary on Question:
Commentary listed underneath question component.

Solution:
(a)   Calculate the embedded value (EV) at December 31, 2017. Show your work.

Commentary on Question:
Most candidates showed their work which is helpful for getting partial credit. A number of candidates calculated their answer in millions, however since the answer is $9,064 they didn't really save much ink by answering in millions. Some incorrectly rounded their calculations, sometimes resulting in an incorrect solution (they got $10,000 due to rounding along the way). Bottom line: it doesn't always pay to do it in millions and don't be careless.

Year	(A) Premium	(B)MCCSR	© Capital	(D) After tax profit on capital	(E)Increase in capital	(F) cashflow to capitol
0	$ 5,000,000.00	$ 450,000.00	$ 675,000.00	$ -	$ -	$ -
1	$ 2,625,000.00	$ 236,250.00	$ 354,375.00	$ 54,000.00	$ 20,250.00	$ 340,875.00
2	$ -	$ -	$ -	$ 28,350.00	$ 10,631.00	$ 365,006.00

4. **Continued**

(A) Premium	year 0 given, year 1 using (1 - .5)(1 + 0.5) for lapse & increase, year 2 given	
(B)MCCSR	Premium * MCCSR factor * statistical fluctuation factor	
© Capital	150% MCCSR	
(D) After tax profit on capital	(target post tax profit - post tax earning on capital) * capital, where post tax earnings = pretax earnings * (1 - tax rate)	
(E)Increase in capital	(pretax earnings on capital)*(1-tax rate)*capital	
(F) cashflow to capital	(E) + change in ©	
(H) PV of after tax profit	54000/1.1 + 28350/1.1^2 = 72,521	
(I) PV of cash flow to capital	340875/1.1 + 365006/1.1^2 = 611,544	
EV	(H) + (I) - capitol employed =	72,521 + 611,544 - 675,000 = $9,065

(b) Describe the recommended practices for an actuarial appraisal to comply with ASOP 19.

Commentary on Question:
There are two main parts to the ASOP, the question asks for Recommended Practices, which is Section 3. There are a number of overlapping points with Section 4 (Communications and Disclosures), but Section 3 is nevertheless the correct source.

Per ASOP 19, an appraisal should include:
- projected, distributable earnings
- sensitivity tested range of key assumptions
- sensitivity testing assumptions, details, results & conclusions
- Applicability / Intended audience for appraisal
- Discount rate(s) used – use a few and test the impact
- Model & Model validation thoroughly discussed and tested
- Treatment of Assets
  o taxes taken into account
- data reliance on data prescribed by others
- documentation and retention
- reliances if other than the actuary's assumptions were used
  o ASOP 23

5. **Learning Objectives:**
2. The candidate will understand and evaluate the risk associated with health insurance and plan sponsorship and recommend strategies for mitigating the risk.

Learning Outcomes:
(2d) Understand how an Own Risk Solvency Assessment (ORSA) complements and differs from traditional risk assessment.

Sources:
Understanding ORSA Before Implementing It (Risk Management – August 2012)

GHS-116-15: NAIC Own Risk and Solvency Assessment (ORSA) Guidance Manual

Commentary on Question:
Parts A and B of this question are fairly straightforward testing the candidate's general understanding of ORSA standards, principles and goals. Part C requires the candidate to consider a high-level enterprise perspective of how ORSA would most effectively impact the organization's risk management process.

Solution:
(a) Describe the minimum standards set out in Insurance Code Principles (ICPs) as they relate to Own Risk Solvency Assessment (ORSA) requirements.

Commentary on Question:
Some candidates answered this question with minimum requirements or procedures, such as filing a summary report annually, rather than minimum standards. However, credit was given if the concepts were addressed in other parts of this question.

ICP 16 requires insurers to identify risk
ICP 16 requires insurers to assess risk
ICP 16 requires insurers address risk
ICP 16 requires insurers to assess their current and future solvency position

(b) Verify the accuracy of the following statements. Justify your answer.

(i) One of ORSA's two primary goals is to provide a legal entity view on risk and capital.

(ii) The ORSA summary report should be based on the insurer's internal reporting of ERM (Enterprise Risk Management) information.

(iii) ORSA prescribes standard bases and methodology so that summary reports are consistent between different insurers.

(iv) The prospective solvency assessment for Section 3 of the ORSA report should be based on current operations in a normal business environment.

5. Continued

Commentary on Question:
Most candidates with basic familiarity with ORSA concepts did well on Part B.

(i)   false – legal entity view already exists; ORSA provides a group-level perspective on risk and capital to supplement

(ii)   True – while the ORSA Summary Report may be tailored for the regulator, the content should be based on the insurer's internal reporting of its ERM information.

(iii)   False – each insurer's ORSA and ORSA Summary Report will be unique, reflecting the insurer's business, strategic planning and approach to ERM.

(iv)   False – the solvency assessment is prospective and should consider both normal and stressed environments

(c)   Describe the considerations that would make an effective ORSA.

Commentary on Question:
Some candidates listed the sections of an ORSA report or how to complete the ORSA report which don't address the question. Part C is about how ORSA can influence how the enterprise incorporates the information into its daily operations and long term strategy. Considerations that would make an effective ORSA are about integrating ORSA into enterprise processes for decision making and addressing risks.

- An effective ORSA will be more about process than results.
- There is no "ORSA score" at the culmination of the exercise.
- ORSA effectiveness should be gauged by the extent to which it is integrated into decision making and planning, both at the strategic and day to day level.
- Effectiveness of processes, such as monitoring for adherence to risk limits – consistent with the adopted risk appetite – are key to the implementation of ORSA.
- The litmus test of ORSA will be how management responds to the next financial crisis or threat.
- The NAIC has placed great emphasis on fostering an interactive dialogue between financial examiners and executive management on the process.