GH CORC Model Solutions
Spring 2014

1. Learning Objectives:

4. Describe Government Programs providing Health and Disability Benefits.

6. Evaluate the impact of regulation and taxation on companies and plan sponsors in Canada

Learning Outcomes:

(4a) Describe benefits and eligibility requirements for social programs in Canada

(4b) Describe how private group insurance plans work within the framework of social programs in Canada

(4c) Compare social programs in Canada and the U.S.

(6a) Describe the regulatory and policy making process in Canada

Sources:

Morneau Shepell 15th Edition Ch. 15, p. 370

Mercer Benefits Legislation in Canada, Morneau Shepell 15th Edition Ch. 15, p. 26

Morneau Shepell 15th Edition Ch. 15, Group Insurance 6th Edition Ch. 13

Canadian Life and Health Insurance Law Ch. 17, p 354

Commentary on Question:

Commentary listed underneath question component.

Solution:

(a) Describe the criteria provincial Medicare plans must meet with respect to the Canada Health Act.

1. Public administration
   - Must be administered on a non-profit basis by a public authority

2. Comprehensiveness
   - Must cover all necessary hospital and medical services

1. Continued

3. Universality
   - All eligible residents must be covered for insured health services

4. Portability
   - Coverage must be portable from one province to another.
   - Waiting period for new residents must not exceed 3 months.

5. Accessibility
   - Insured services must be provided on uniform terms and conditions for all residents
   - Reasonable access to insured services must not be precluded or impeded by charges or other mechanism.

(b)

(i) Describe approaches used by different Canadian provinces to fund government sponsored medical benefits.

(ii) For each approach, identify a province to which it applies.

Federal transfer payments (Canada Health and Social Transfer – CHST), in cash or tax transfers, to provincial plans that meet criteria of the Canada Health Act
- Each province established method of financing the balance of the cost

Direct cost sharing with residents and employers
- BC is a fixed premium
- Ontario premium is based on income level

Some provinces levy payroll tax on employers
- May vary by size or annual revenue of the employer
- Ontario, Quebec, NFLD, Manitoba

Some through general revenue
- NB, NS, PEI, Saskatchewan, territories

Additional funding has been generated by taxation of private group insurance plans premiums
- QC (9%), Ontario (8%), Manitoba (7%)

(c) List and compare medical services typically provided for middle income active employees through government benefit plans in Canada and in the U.S.

1. Continued

Commentary on Question:
Just listing the services would not be a complete comparison – the candidate would need to state that in Canada services are offered to everyone, while in the USA they are limited to certain groups

Services that are covered through the Canadian system:
Hospital services: standard ward accommodation and outpatient services
Physicians
Dental care for children
Annual eye exam
Prescription drugs (only in some provinces, e.g. BC)
Limited paramedical practitioners
Some emergency hospital and medical costs arising outside Canada
In Canada, healthcare is offered to everyone, as a basic, including those employed and actively working, but in the US it is not offered to most employees (through government)

(d) Describe the interaction between provincial Medicare plans and private insurance plans including potential concerns regarding Medicare if the private health provider market expands.

Several provinces prohibited private insurance of hospital and medical services obtained outside their provincial Medicare program, if these services were available under the provincial program.

Some provinces allow non-participating physicians to set their fees, but cost not refunded by Medicare

Some prohibit doctors who opt out from billing private patients more than public sector tariff

Some have eliminated any form of cross-subsidy from public to private sector

The growth of private sector would undermine strength of public sector and its ability to achieve the objective of accessibility

Private insurance would not be available to those who cannot afford it thus negating concept of access on need and not on wealth

Control measures should be implemented to avoid siphoning-off resources from public sector (for example physicians only working for the private sector)

Private insurers would select better risks and higher income patients and leave others to the public system

Private could provide incomplete coverage leaving high risk surgery to public system

More efficient administrative delivery

The quality of services provided by private sector may not be guaranteed

The presence of the private sector could increase the overall costs of health

1. Continued

(e)

(i) Describe policy provisions typically included in a private group health insurance plan in Canada.

(ii) Explain why they are needed.

Commentary on Question:
Insufficient just to list the items – the candidate must show understanding by explaining what each provision is and why it is needed

Eligibility provision

- Each group policy must identify which members of the group are eligible

Termination of policy

- Describe the benefits which insurer remains liable for.
- Define insurer's rights and liabilities to provide continued coverage

Pre-existing conditions provision

- Define that benefits will not be paid for injury or illness that results from a pre-existing conditions not disclosed on the application for insurance in order to reduce anti-selection

Coordination of benefits

- Defines the primary provider of benefits in situation where group insured has duplicate medical expense coverage
- To prevent insured who is covered under more than one group policy from receiving benefit amounts that are greater than amount of expenses incurred

Overinsurance provision

- Prevent insured who has duplicate insurance coverage from profiting from sickness, injury or disability by getting more benefits than actual cost incurred.

Incontestable clause

- Allow the right to insurer to avoid contract in case of fraud.

Entire contract provision

- Prescribe documents that form a contract

Grace period provision

- Give the insurer right to sue policyholder to recover the unpaid premium, or policyholder may pay interest on unpaid premium.

Misstatement of age or sex

- Give the insurer the opportunity to pay the amount that would have been paid for the correct age or charge what the premium should have been

2. Learning Objectives:

5. The candidate will understand how to prepare and interpret insurance company financial statements in accordance with IFRS and IAS

Learning Outcomes:

(5a) Interpret insurer financial statements from the viewpoint of various stakeholders

Sources:

CIA educational note on sources of earnings

Commentary on Question:

Commentary listed underneath question component.

Solution:

(a) Describe the differences between group and individual lines of business when determining sources of earnings.

Commentary on Question:

Candidates need to describe the differences between individual and group plans in terms of calculating the sources of earnings – not simply listing the differences between the two different types of contracts in general.

There are several differences between individual & group lines of business in terms of sources of earnings.

Group earnings are analyzed as a function of pricing assumptions whereas individual lines are analyzed as a function of valuation assumptions.
Group earnings are split between the first policy year and renewal years.

Group business is more flexible in terms of underwriting and judgment in setting the final rate. Underwriting is also adjusted at regular intervals and as a result initial and renewal underwriting processes are the most critical determinants of future profitability.

(b) Describe the methodology commonly used to analyze sources of earnings in the group line of business.

Commentary on Question:

Earnings and analysis must be separated into first year and renewal years.

Identify the average expected pricing margin as % of premium for commissions, premium taxes and standard risk and profit charges. It could be appropriate to audit underwriting to confirm the validity of the assumption, since it could have an effect on the claims gains or losses in the source of earnings analysis.

Identify the expected % gains for the various sources of earnings.

2. Continued

1. Exp'd Profit on In force Operations - Renewal Periods
2. Exp'd risk and profit loads on renewal business: Sum over all periods (except first) of the actual premium* net risk and profit loads
3. Exp'd gain from investment income: Mean liabilities for the period * expected gain on interest
4. Exp'd gain from commission : (Actual premium* pricing commission margin) *expected % gain on commission
5. Exp'd gain from expense : (Actual premium* pricing expense margin) *expected % gain on expense
6. Exp'd gain from fee income : Actual fee income *expected % gain on expense
7. Exp'd gain from premium tax : (Actual premium* pricing premium tax margin) *expected % gain on premium tax

Exp'd Gain on In force Operations - Renewal Periods

1 Experience gain on claims (calculated by policy period) =
- Actual premiums, minus
- Actual incurred claims (including conversion charges), plus
- Actual required interest on liabilities CY, minus
- Actual commission loads CY, minus
- Actual premium tax loads CY, minus
- Actual expense loads CY, minus
- Actual net profit loads CY, for renewal policy periods.

2 Experience gain on net investment income - insured business =
- Actual net investment income on insured business CY, minus
- Actual required interest on liabilities, minus

3 Experience gain on commissions =
- Actual commission loads CY, minus
- Actual commissions, minus

4 Experience gain on expenses =
- Actual expense loads CY, minus
- Actual expenses, minus
- Experience gain from expense, excluding fee income groups, plus
- Actual required interest on liabilities.

5 Experience gain on fee income =
- Actual fee income CY, minus
- Actual expenses, minus
- Experience gain from expense, excluding fee income groups, plus
- Interest on amounts on deposit for fee income groups, minus
- Interest credits to policyholders for fee income groups, minus

2. Continued

6 Experience gain on premium taxes =

- Actual premium tax loads CY, minus
- Actual premium tax, minus

Exp'd Profit on in force Operations - First Policy Period

- Actual premium in first policy period * net risk and profit margin for the first policy period.

Exp'd Gain on in force Operations - First Policy Period

- Same formulas as above but for first period only.

(c)

(i) Calculate the 2012 LTD sources of earnings. Show your work.

(ii) Based on your analysis in (i), describe further analyses that you would undertake to explain the situation.

Commentary on Question:
Candidates need to accommodate the growth pattern illustrated by the increase in premium within the calculations.

(i)

			FY	Ren	total
exp'd profit			(1,120,000)	4,560,000	3,440,000
profit impact by source :					0
premium volume		((Actual FY prem/Exp'd FY Prem)*Exp'd FY profit)-Exp'd FY profit-	*(1,280,000)*	*(394,615)*	(1,674,615)
investment income		(Actual FY inv inc - (Actual FY prem/Exp'd FY Prem)*Exp'd FY inv inc)	*25,000*		
		For all years, actual vs. exp'd inv inc should be calculated on mean liab which is not in the available data in the question: for the FY, it could be assumed to be a % of premium, for the renewal, need to require more info about the liabilities, the interest credited on the liabilities			
		For benefits paid and act'l liabilities, the FY could be estimated to be a % of premium; for the renewal years, the benefit payments and change in act'l liabilities are not provided so they need to be examined.		*(192,308)*	(492,308)
claims	*ben paid*	(Actual FY claims - (Actual FY prem/Exp'd FY Prem)*Exp'd FY claims)	*(250,000)*		
	act'l liab	(Actual FY CHG in Liab - (Actual FY prem/Exp'd FY Prem)*Exp'd FY CHG in liab)	*(75,000)*		
err		(Actual FY err - (Actual FY prem/Exp'd FY Prem)*Exp'd FY err)	*0*	*1,626,923*	1,626,923
expenses		(Actual FY expenses - (Actual FY prem/Exp'd FY Prem)*Exp'd FY expenses)	*(150,000)*	*(950,000)*	(1,100,000)
commission		(Actual FY comm - (Actual FY prem/Exp'd FY Prem)*Exp'd FY comm)	*10,000*	*0*	10,000
premium taxes		(Actual FY prem tax - (Actual FY prem/Exp'd FY Prem)*Exp'd FY prem tax)	*0*	*0*	0
					0
Total Gain/Loss			(1,720,000)	90,000	(1,630,000)
Actual			*(2,840,000)*	*4,650,000*	1,810,000

2. Continued

(ii) In the first year premiums, investment income, benefits, reserves and expenses were all higher than expected.

In the renewal years, premiums, investment income, benefits, and reserves were lower than expected – however expenses were higher than expected.

Deeper analysis is required on incurred claims and investment income, along with why operational expenses contributed a significant loss.

3. Learning Objectives:

3. The candidate will understand how to recommend an employee benefit strategy.

4. Describe Government Programs providing Health and Disability Benefits.

Learning Outcomes:

(3c) Recommend an employee benefit strategy in light of an employer's objectives.

Sources:

GH_CLHIA The Protection of Personal Information Under Group Benefit Plans

GH_Quebec Drug Insurance Program and Its Impact

Group Ins 6th Ch 16 Regulation in Canada (pg. 249)

CLHIA Guideline G3 & G4

Commentary on Question:

Commentary listed underneath question component.

Solution:

(a) Joey Bats would like you to audit the most recent year's drug claims. Describe how to maintain the privacy of employees' personal information and what information can be disclosed to you and Joey Bats' management, in order to comply with applicable laws.

In order to maintain the privacy of employees personal information, the following needs to be adhered to:
All information about an identifiable individual is personal (e.g. name, Social Insurance Number, age, medical history, financial information)
Information about any individual must be protected, regardless of whether it is the plan member, dependent, etc.
The insurer is responsible for protection of personal information collected by, or in its custody.
Organizations collecting, using and/or disclosing personal information must be deemed something that a "reasonable person" would consider appropriate.
Consent must be required by the employer to share personal information.
In terms of what can be shared between you and Joey Bat's management:
A tri-party non-disclosure agreement must be signed between insurer, Joey Bats' management and you.
Claims information for each individual can be provided to you, but the insurer should not identify the claimant (e.g. by providing ID)
Limit information disclosed to employer as they are not conducting the audit.

3. Continued

It is suggested that only aggregated information be provided to Joey Bats' management (e.g. total paid claims by major claims category, results of audit with no information to identify any individual's health claims).

(b) Management at Joey Bats would like to understand the impact of RAMQ in Quebec.

(i) Describe the requirements for a private plan to be RAMQ compliant and any required changes to Joey Bats' plan.

(ii) Explain changes Joey Bats can make to encourage employees in Quebec to participate in RAMQ upon reaching age 65.

Commentary on Question:
None

(i) In order to be RAMQ compliant:
Company must offer a plan to any employee, spouse, etc. below age 65
A group insurance plan providing any type of sickness and accident benefits must cover prescription drugs.
Spouse and dependent children must be covered for prescription drugs
The private plan must reimburse to at least the minimum coinsurance level and deductible level of the RAMQ provisions in effect (deductible does not need to be applied on a monthly basis)

(ii) A change to Joey Bats' plan is that the maximum out-of-pocket level is reduced to equal or lower than current RAMQ level of approximately $1,000 ($992 in 2013).
While employers cannot terminate benefit coverage for plan members 65 or older, they can charge the member a significant contribution rate in order to stay in the plan, which forces members to elect RAMQ. The private plan can continue to pay for items that RAMQ does not cover, such as the deductible and co-insurance, as well as prescription drugs not on the RAMQ formulary.

(c)

(i) Outline the drug pooling requirements of insurers and self-insured plan administrators in Quebec, and explain the rationale of the government of Quebec in putting into place these requirements.

(ii) Describe the rules for establishing the Quebec drug pooling threshold for participating insurers and self-insured plan administrators.

3. Continued

Commentary on Question:
None

(i) All insurers, including administrators in the case of self-insured plans, must pool the risks arising from mandatory coverage.

The rationale is to allow for prescription drugs to be affordable to all residents of Quebec, and so that the members of a group should not be penalized by any large claim arising from one person.

(ii) The pooling threshold is established based on the size of the group so that smaller groups will not be heavily penalized for catastrophic claims.

(d) The company has a terminated employee age 55 who would like to continue their life insurance coverage. Explain any guidelines that apply and what options may be available.

A terminated employee at the age of 55 has several options to continue his life insurance coverage. He can apply for conversion to an individual contract of insurance with no requirement of evidence of insurability if the application is made within 31 days. He has the option to convert to a one-year term plan to age 65 or any individual contract of insurance being issued by the insurer.

(e) Calculate the payment made by each of the two insurers and describe how the payment is made to each party. Show your work.

According to the CLHIA guideline, the first carrier (in this case, the individual policy) pays the insured party what is owed under their plan provisions.

Any other carriers (in this case, the group policy) reimburse their share of the common expenses to the first carrier, and pays the insured directly for any remaining expenses for which it has a liability.

	Travel Insurance Policy (if alone)	Joey Bats Policy (if alone)	Common core	Travel Insurance Policy (exclusive)	Joey Bats Policy (exclusive)	Total
Cost	$125,000 - $25,000 = $100,000	$60,000	$60,000	$40,000	$0	$100,000
Share of Travel Insurance Policy			$30,000	$40,000	$0	$70,000
Share of Joey Bats Policy			$30,000	$0	$0	$30,000
Share paid by insured			n/a	n/a	n/a	$25,000

3. Continued

From the member's perspective, she would receive $100,000 from the individual carrier, and $0 from the group carrier.

From the carrier's perspective, the individual carrier would be reimbursed $25,000 from the group carrier.

4. Learning Objectives:

7. Understand and evaluate Retiree Group and Life Benefits in Canada.

Learning Outcomes:

(7b) Determine appropriate baseline assumptions for benefits and population

(7c) Determine employer liabilities for retiree benefits under various accounting standards

Sources:

Yamamoto Ch. 9, ASB 6000

Towers Watson IAS vs FAS summary, IAS 19, Yamamoto CH. 7

Overview of Post Retirement Benefit Calculations

Commentary on Question:

The question is testing Candidates' understanding of developing reasonable key assumptions for retiree group benefits plan valuation as well as the accounting knowledge for the calculation accrued benefit obligations, and the treatment actuarial gains and losses and plan amendments.

Solution:

(a) Explain how you would validate each of your manager's assumptions and the sources you would reference.

Commentary on Question:

Candidates are required to provide a description of at least one way to validate the assumption as opposed to simply listing the assumptions.

1. Discount rate: rate is based on high quality fixed income investments that are currently available in the market so I would compare the assumption to benchmark indices and also use the rule of thumb that these often fall 2% to 4% above inflation

2. Trend rate: I would compare this against recent claims experience trends and long term expectations relative to the inflation rate and the long term expectation of GDP growth.

3. Claims cost: I would collect the claims data for the current retiree population and compare the per capita cost for versus the assumption provided.

4. Termination rates: I would collect what data was available for the group in terms of historical turnover and compare that to the annualized assumption provided.

4. Continued

5. Retirement age: I would collect actual retirement data to validate the average retirement age for employees and compare that against the assumption.

6. Age 65 annuity: Effectively this assumption is using the provided trend and discount rate and simplifying the mortality component. I would convert the rate to a life expectancy and compare that against various mortality tables available from SOA studies.

(b) Describe how you would modify each assumption to increase the accuracy of the calculation in a formal valuation.

Commentary on Question:
Candidates are required to provide a description as why or why not a change would be proposed.

1. Discount rate: A single discount rate is typical for these valuations so assuming the checks under part A suggested the assumption was reasonable relative to benchmarks no further adjustment would be required for a formal valuation

2. Trend rate: I would consider using a graded scale if I felt current short term trend rates may be different than the long term rates would be.

3. Claims cost: I would consider reviewing the impact of age on claim amounts and adjust the assumption for different ages.

4. Termination rates: These rates often differ by age and/or service so I would review experience and potentially use a table as opposed to a flat rate

5. Retirement age: I would consider using a table with chances of retiring at any eligible retirement age. This can be a key assumption as retiring earlier or later results in additional benefit payments under the plan unlike a pension plan that may be adjusted based on retirement date.

6. Age 65 annuity: The annuity factor is quite a simple approximation of the length of time a retiree will receive payments. I would use a mortality table that varies by age and I would look to SOA studies to obtain an appropriate mortality table.

(c) Calculate the Accrued Benefit Obligation. Show your work.

Commentary on Question:
Candidates are required to show work to receive all points.

4. Continued

Group	Number	Per Capita Present Value from 65	Per Capita EBO at Valuation	Total EBO at Valuation
A	B	C	D	E
Active	500	6,000	2,966	1,483,000
Retiree	200	6,000	6,000	1,200,000
Group	Hire Age	Total Service at Retirement	ABO Factor	Total ABO at Valuation
A	F	G	H	I
Active	40	25	0.2	296,600
Retiree	n/a	n/a	1.0	1,200,000
Total				1,496,600

C = claims cost x annuity factor = 500 x 12

D = C x {[(1+trend)/(1+discount)] ^ years to 65} x (1-termination rate) ^ years to 65
For retirees no adjustment required as "years" = 0
For actives = 6,000 x [1.045/1.05]^20 x .97^20 = 2,966

E = B x D
F = current age – current service = 45 – 5
G = retirement age – hire age = 65 – 40
H = current service / service at retirement for actives and fully attributed for retirees
I = EBO at valuation x ABO factor

(d) An assumption change has increased the annual claims cost per capita to $600. Calculate the annual accounting expense under both IAS 19 (2008) and FAS 106 assuming the minimum amortization allowed by each accounting standard. State all assumptions and show your work.

The minimum amortization amount under both accounting standards is the same. The approach used is the 10% corridor approach. Therefore the total accounting expense is equal under both approaches.

Due to the increase in claims cost an actuarial loss arises equal to the percentage change in claims cost (600/500 – 1) = 20%
Loss = 0.20 x 1,496,600 = 299,320
New ABO = 1,795,920

Service cost = EBO / average years of service at retirement for actives and zero for retirees

4. Continued

New Service cost = 1,483,000 x 1.2 / 25 = 71,184

New Expected Benefit Payments = retirees x claims cost = 200 * 600 = 120,000

Interest cost = discount rate x (ABO + Service Cost – Expected Benefit Payments/2)
Interest cost = .05 x (1,795,920 + 71,184 – 120,000/2) = 90,355

Minimum amortization = (Loss – 10% x New ABO) / expected average remaining service lifetime = (299,320 – 0.10 x 1,795,920) / 20 = 5,986

Accounting expense = service cost + interest cost + amortization = 167,525

(e) A plan design change has increased the annual claims cost per capita to $600. Calculate the new annual accounting expense under IAS 19 (2008) and FAS 106. State all assumptions and show your work.

The annual expense will differ for FAS versus IAS 19 (2008) as the treatment of plan amendments is handled differently. The service cost and interest cost will be equal to those calculated in part D given the change to claims cost is the same.
Service cost = 71,184
Interest cost = 90,355

FAS amortizes prior service cost over the expected average remaining service life of the active participants. In this case it is from 45 to 65 or 20 years. The actuarial loss as calculated in part D was 299,320
Amortization FAS = 299,320 / 20 = 14,966

IAS (2008) amortizes prior service cost for fully vested members immediately and non-vested benefits over the average remaining service lifetime of the population. In this case the retirees are fully vested and the actives are not fully vested.
Retiree ABO change = 0.20 x 1,200,000 = 240,000
Active ABO change = 0.20 x 296,600 = 59,320
Amortization IAS = 240,000 + 59,320/20 = 242,966

Expense FAS = 176,505
Expense IAS = 404,505

5. Learning Objectives:

5. Prepare and interpret insurance company financial statements in accordance with IFRS & IAS.

Learning Outcomes:

(5a) Interpret insurer financial statements from the viewpoint of various stakeholders.

(5e) Compare key differences and similarities in measures by accounting basis.

(5g) Explain fair value accounting principles and describe International Accounting Standards (IAS).

Sources:

Group Insurance, 6th Edition, Bluhm Chapter 21 and 45

Commentary on Question:

Commentary listed underneath question component.

Solution:

(a) List the items included in the Life-1 annual statement under Canadian GAAP.

- Description of all assumptions used, and a full and complete justification for each assumption
- Description of any approximations used
- Changes in the assumptions and the effect thereof
- Signed statement which affirms compliance with the Standards of Practice of CIA
- Description of how the actuary is compensated and a signed statement to the effect that the actuary has performed his duties without regard to personal consideration
- Signed copy of the opinion of the actuary
- Any other information that the Superintendent may require

(b) Describe how the 2011 change to IFRS in Canada affected group insurance statutory reporting results.

Commentary on Question:

The list below is not exhaustive but would achieve full credit for this question. A number of candidates described the impact of IFRS pertaining to the accounting of the post-retirement benefits valuation which resulted in no credits given.

5. Continued

- Retrospective application was required for most organizations so restatement of prior years was required
- IFRS was effective in 2011 but comparison information was required in 2010 reporting under Management's Discussion and Analysis
- Impaired assets under IFRS must be recognized immediately if the recoverable value is less than the value that is carried, though the value is the higher of the fair value and the discounted value of expected cashflows. Previously under CICA, the value was the undiscounted value of expected cashflows
- Disclosure requires that the entity disclose enough information to enable users to evaluate the financial position and performance
- GAAP allowed reinsurance assets to reduce the liabilities but this is not allowed under IFRS where they are treated as assets
- CALM continues to be mandatory under IFRS until phase 2 becomes final

(c) Describe the major modifications that must be made to U.S. Statutory reporting results for group health insurers when converting to U.S. GAAP.

- Removal of some of the conservatism in reserving assumptions
- Full recognition of deferred taxes
- Recognition of the market value of most assets
- Recognition of lapses in reserves
- Capitalization of deferred acquisition costs
- Recognition of all receivables and allowances
- Removal of the AVR and IMR

(d) Explain the key conceptual differences between U.S. Statutory reporting and U.S. GAAP reporting for group health insurers.

Commentary on Question:
A number of candidates either provided an answer that was too brief or vague, resulting in partial credits only.

- GAAP reporting attempts to match the incidence of revenue and expenses, while statutory reporting tends to accelerate recognition of expenses and defer recognition of revenue
- Statutory reporting attempts to determine the value of the insurance company if it were to liquidate, while GAAP looks at the insurance company as a going concern

5. Continued

- Many of the conservative assumptions required for statutory reporting can be replaced by a much less conservative margin for adverse deviation in GAAP

(e) Define and explain the three financial measures provided by Oingo.

Commentary on Question:
Full credits cannot be received without both the formula and the description of what the formula is illustrating.

Total Asset Turnover = Revenues/Total Assets
- Represents the total investments required to meet the demands of the business

Net Profit Margin = Net Income/Revenue
- Represents what portion of total sales results in profit and measures the profitability of the company

Total Leverage Ratio = Total Assets/Shareholder Equity
- Represents how much creditors' money can be magnified to improve the return on assets for the shareholders

(f) Explain whether MonCo should invest in Oingo based on MonCo's return on equity requirements. Justify your answer.

Commentary on Question:
In order to receive full credit, the formula for ROE must be specified and explicit recommendation relevant to MonCo's ROE requirement must be made.

Return on Equity = Total Asset Turnover x Net Profit Margin x Total Leverage Ratio
Oingo Return on Equity = 70.0% x 3.5% x 150% = 3.7%
Since MonCo's ROE requirement is 5%, but Oingo ROE is 3.7%, therefore MonCo should not to invest in Oingo.

6. Learning Objectives:

4. Describe Government Programs providing Health and Disability Benefits.

6. Evaluate the impact of regulation and taxation on companies and plan sponsors in Canada.

Learning Outcomes:

(4a) Describe benefits and eligibility requirements for social programs in Canada.

(4b) Describe how private group insurance plans work within the framework of social programs in Canada.

(6b) Describe the major applicable laws and regulations and evaluate their impact

Sources:

Group Insurance, 6th Edition, Bluhm – Chapter 16 Regulation in Canada, and Mercer Benefits Legislation in Canada 2013

Commentary on Question:

Commentary listed underneath question component.

Solution:

(a) Describe government income replacement programs available to John and specify differences by province.

Commentary on Question: *Most candidates did not specify provincial differences or indicate various government programs' coordination with private plans (first/second payor).*

Employment insurance - sickness benefits

- to qualify for sickness benefits need 600 hours in last 52 weeks
- 55% of income up to a max weekly benefit
- would be second payor and would be offset by group insurance plan
- in Quebec contribution rate would differ

Workers Compensation

- provides benefits arising from the course of employment, covers illness, injury or death
- program is regulated by each province
- benefits and maximum earnings vary by province
- Workers Compensation is first payor

Canada / Quebec Pension plan

- provides pension, disability benefits and death benefits
- disability benefit is only for severe and prolonged
- CPP disability benefit would be first payor

6. Continued

- CPP is same across Canada except in Quebec with different contribution rates and benefit levels

(b) Describe other benefits offered by employment insurance.

Commentary on Question:
Description of Regular benefit did not receive any credits for this part.

Maternity benefits - 15 weeks of benefit for the biological mother

Paternal benefits - 35 weeks of benefit to biological parents or adoptive parents. Can be shared between spouses

Sickness – payable for up to 45 weeks depending on number of hours worked in last 52 weeks. Not payable as a result of voluntary termination or termination for misconduct

Compassionate Care benefits - 6 weeks if absent from work to care for gravely ill or dying family member

(c) John's injury was determined to be the result of aggravating a problem with his back caused a few months earlier while skiing. He was approved for a monthly CPP benefit of $1,000 after 12 months on disability. John's tax rate while on disability is 20%.

(i) Calculate the overall net payment to John during his second month of disability. Show your work.

(ii) Calculate the overall net payment John would receive in month 14. Indicate the sources of this payment and show your work.

Commentary on Question:
None

(i) John would only be eligible for EI sickness benefits in the second month of disability.
Benefit is 55% of earnings up to maximum weekly benefit of $501.
John would get maximum benefit of $501 weekly.
EI is taxable and therefore would receive 80% of $501 (20% tax rate in question). Therefore weekly benefit of $400.80

6. Continued

(ii) John would be eligible for both CPP and LTD benefits in month 14.
Non-taxable LTD plan (employee paid)
$200,000 / 12 = $16,667
66.67% * $16,667 = $11,111
However max benefit is $6,000 - therefore LTD benefit is $6,000
CPP is $1,000 as noted in question, however it is taxable benefit.
Therefore, the net CPP benefit is $800 ($1,000 * (1-20%)).
As the LTD benefit is integrated with pre-tax CPP, the net LTD benefit is $5,000 ($6,000 - $1,000).
Therefore John would receive $5,000 per month from LTD plan and $800 per month from CPP for total of $5,800.

7. Learning Objectives:

3. The candidate will understand how to recommend an employee benefit strategy.

Learning Outcomes:

(3a) Describe employer's rationale and strategies for offering employee benefit plans.

(3c) Recommend an employee benefit strategy in light of an employer's objectives

Sources:

The Handbook of Employee Benefits, Rosenbloom, Chapters 27 & 32

Commentary on Question:

Commentary listed underneath question component.

Solution:

(a) Describe challenges small companies face when offering group medical insurance.

Commentary on Question:

Candidates tended to score well on this section. At times the candidates would mention items that would actually be favorable to buying insurance, such as the small group's lack of credibility.

- Because they are most often fully insured, they are subject to state-mandated plan design options
- Because the employees of most small companies are in a relatively small geographic area, the plans must be designed using options available in that area.
- Small companies in general, and start-up companies in particular, may have to provide additional documentation not required for larger companies in order to put a new plan in place so that insurance carriers can verify the existence of an actual company, and not just banding together of people solely for the purpose of obtaining insurance.
- Most states do not allow companies and organizations to join forces to form larger purchasing pools in order to get group discounts.

(b) Small companies want to attract top talent and have considered not requiring employee contributions for medical care insurance. Describe why small companies should require employee contributions.

Commentary on Question:

Section B was the most correctly answered by the candidates.

7. Continued

- Most employees are accustomed to paying some level of contribution
- Requiring a contribution usually motivates or forces employees who have coverage, or the option to get coverage elsewhere to decline the coverage under their small employer's plan.
- It is much easier to set policy and precedent, and plan for future growth, by introducing the concept of contributions at the inception of the plan when there are only a few employees
- Having a contribution also can help to avoid potential legal problems.

(c) Describe reasons why insuring an STD plan may be more efficient than small companies self-insuring the risk.

Commentary on Question:
A majority of candidates obtained partial credit on this question, with few receiving full credit. Some candidates listed out the attributes of STD, which will be present whether it is fully insured or self -insured.

- The cost is not expensive when intelligently designed
- It takes the employer out of the role of having to deal with privacy issues and claim adjudication
- Just one claim per year could pay for the cost of the annual premium

(d) Describe the communication process you would use when educating various types of employees on their benefits:

(i) New Employees

(ii) Annual Open Enrollment

(iii) Communications through the year

(iv) Retirees

Commentary on Question:
The majority of candidates did not fully answer this question. Candidates typically listed the materials to be given out and how these materials would be delivered. Most candidates did not describe why the process is important or important pitfalls to avoid. Almost no candidate received full credit on this part of problem.

7. Continued

(i) New Employees

- HR departments have developed communication tools that incorporate notification and disclosure requirements and present their benefits program with the most advantageous aspects.
- Common problems that can arise are misunderstandings about actual benefits offered, missing applications, vendor enrollment delays, and employee challenges to mandatory benefits.

(ii) Annual Open Enrollment Process

- Open enrollment communication process requires a major commitment of HR resources. Much effort is devoted to updating and revising personal data reports, printed materials, and Web-application programs.
- Best practices entail a communication campaign that motivates employees to take the time to understand the plan changes and their impact, get their questions answered, and make informed decisions on next year's choices.

(iii) Communications through the year

- Using the life-events approach, the plan sponsor extracts from each its benefits plans applicable information for a specific event and then in one place the sponsor communicates step by step the option available and action required to make benefit changes as a result of the particular life-event.
- An employee who has access to a fully interactive HR Web site that uses a life-event approach is an empowered individual.

(iv) Communications to Retirees

- The mode of communication for the retiree group has been traditionally predominantly printed materials. However, the use of Web-based programs is gaining ground with newly retired works and older retirees having greater access to computers and more familiarity with the e-world.
- Communication to retirees should state clearly what has not changed, be very specific of how a change

8. Learning Objectives:

1. The candidate will understand how to describe plan provisions typically offered under:
   a. Group and individual medical, dental and pharmacy plans
   b. Group and individual long-term disability plans
   c. Group short-term disability plans
   d. Supplementary plans, like Medicare Supplement
   e. Group and Individual Long Term Care Insurance

2. The candidate will understand and recommend a manual rate for each of the coverages described in Learning Objective 1.

Learning Outcomes:

(1c) Describe each of the coverages listed above

(2c) Calculate and recommend assumptions

Sources:

Group Insurance, 6th Edition, Bluhm, Chapter 33, pages 541 - 543.

Group Insurance, 6th Edition, Bluhm, Chapter 38, pages 632 - 638.

Commentary on Question:

Candidates tended to do fairly well, overall, on this question. The overall goal was to show understanding of calculating claims costs based on specific utilization and cost assumptions, and ultimately use this information to calculate an expected premium. Although some candidates may have differed from the model solution, stating your assumption (with it being a reasonable assumption) could still result in receiving full credit. Additionally, candidates needed to remember to fully describe an answer when it was asked, instead of just listing individual bullet points.

Solution:

(a) Calculate the 2014 PMPM total gross and net cost assuming no change in benefits. Show your work.

Commentary on Question:

Candidates generally did well on the calculations in this section. To earn full credit, candidates needed to calculate the 2014 gross and net PMPMs and show their work. The given cost and utilization figures needed to be trended for two years in the calculation. Some candidates only applied one year of trend, so partial credit was given. Some candidates were not sure which annual trend value to apply to certain services, but as long as the candidate stated their assumption, full credit was granted. Lastly, a few candidates correctly calculated the gross PMPM cost, but did not account for the copay correctly when calculating the net cost. Partial credit was given in these situations.

8. Continued

The relevant numbers are shown in the table below, followed by the formulas used.

Services	2012 Services per 1,000	2012 Cost per Service	2012 to 2014 Cost Trend	2012 to 2014 Util. Trend	2014 Annual Services per 1,000 Members	2014 Avg Cost per Service
Hospital IP						
Medical	120	$5,000	6.09%	8.16%	129.79	$5,304.50
Surgical	100	$9,500	6.09%	8.16%	108.16	$10,078.55
Hospital OP						
ER	175	$1,300	4.04%	6.09%	185.66	$1,353
Radiology	310	$700	4.04%	6.09%	328.88	$728
Surgery	125	$3,400	4.04%	6.09%	132.61	$3,537
Professional						
Office Visits	5,000	$120	2.01%	6.09%	5,304.50	$122
IP Surgery	50	$3,000	2.01%	6.09%	53.05	$3,060
OP Surgery	600	$600	2.01%	6.09%	636.54	$612
Outpatient MH	600	$150	2.01%	6.09%	636.54	$153

For each category, the 2012 services per 1,000 members and average cost per service was given.

The utilization and cost trends are calculated as: (1 + Annual Trend) ^ 2 – 1

2014 Annual Services per 1,000 Members = (2012 Annual Services per 1,000 Members) x (1 + 2012 to 2014 Util Trend)

2014 Avg Cost per Service = 2012 Avg Cost per Service x (1 + 2012 to 2014 Cost Trend)

With these pieces of information, the PMPMs can be calculated below.

8. **Continued**

Services	2014 Annual Services per 1,000 Members	2014 Avg Cost per Service	2014 Gross Cost PMPM	2014 Value of Copay PMPM	2014 Net Cost PMPM
Hospital IP					
Medical	129.79	$5,304.50	$57.37	$2.70	$54.67
Surgical	108.16	$10,078.55	$90.84	$2.25	$88.59
Hospital OP					
ER	185.66	$1,353	$20.93	$1.55	$19.38
Radiology	328.88	$728	$19.96	$0.69	$19.27
Surgery	132.61	$3,537	$39.09	$1.11	$37.99
Hospital Subtotal			$228.19		$219.90
Professional					
Office Visits	5,304.50	$122	$54.11	$11.05	$43.06
IP Surgery	53.05	$3,060	$13.53	$0.00	$13.53
OP Surgery	636.54	$612	$32.47	$0.00	$32.47
Outpatient MH	636.54	$153	$8.12	$0.00	$8.12
		Total	$336.41	$19.35	$317.07

2014 Gross Costs PMPM =

(2014 Annual Services per 1,000 Members x 2014 Avg Cost per Service) / (12 x 1000)

2014 Value of Copay PMPM = (2012 Copay x 2014 Annual Services per 1,000 Members) / (12 x 1000)

2014 Net Cost PMPM = 2014 Gross Costs PMPM - 2014 Value of Copay PMPM

The total gross cost PMPM for all services in 2014 is $336.41.

The total net cost PMPM for all services in 2014 is $317.07.

8. Continued

(b)

(i) Describe the components of medical trend.

(ii) Calculate the gross cost annual trend of Gross Cost from 2012 to 2014 for each of hospital, physician, and all services. Show your work.

Commentary on Question:
The first part of this question asked candidates to describe the components of medical trend. As such, a description was needed for the drivers of trend that the candidate identified. Candidates who just wrote a bulleted list of items with no explanation did not receive credit since they did not describe as the question required. A variety of answers was acceptable, as long as a reasonable description was given.
In the second part of the question, candidates had to calculate the annual gross cost trend for hospital, physician, and all services, with most candidates performing well. Two common mistakes were forgetting to take the square root to get to an annual trend number and forgetting to subtotal the hospital services. Partial credit was given to candidates who made these mistakes but otherwise had the calculation correct.

General Macroeconomic Force of Trend – general aging causes an increase in medical trend, as does inflation (price of goods/services). The supply of doctors and their specialty also impacts the costs of medical services since typically as supply decreases, prices increase.
Changes to provider reimbursements - changing to HMO managed care products with greater control of costs vs. using general fee for service reimbursement model can cause a decrease in medical trend.
Changes in covered populations – increasing the number of older members that are covered could cause overall claims costs to increase.
Changes in covered services/benefits – By adding or changing benefits, such as reducing a physician copay, you could increase utilization of that service, and increase overall medical costs
Other random fluctuations – such as an unexpected expensive flu season could increase claims costs.
Effects of benefit leveraging - leaving copays the same can have a different impact on allowed vs net trends
Company initiatives to control costs like prior authorizations

8. Continued

Gross PMPM = (Services per 1,000 x Cost per service) / (12 x 1,000)

Services	2012 Services per 1,000	2012 Cost per Service	2012 Gross PMPM Benefit Costs
Hospital IP			
Medical	120	$5,000	$50.00
Surgical	100	$9,500	$79.17
Hospital OP			
ER	175	$1,300	$18.96
Radiology	310	$700	$18.08
Surgery	125	$3,400	$35.42
Hospital Subtotal			$201.63
Professional			
Office Visits	5,000	$120	$50.00
IP Surgery	50	$3,000	$12.50
OP Surgery	600	$600	$30.00
Outpatient MH	600	$150	$7.50
Grand Total			$301.63

The 2014 gross costs were found in part A.

Annual 2012 to 2014 Hospital gross cost trend = ($228.19 / $201.63) ^ 0.5 – 1 = 6.4%

Annual 2012 to 2014 Physician gross cost trend = ($108.22 / $100.00) ^ 0.5 – 1 = 4.0%

- Note that physician is assumed to include office visits, IP surgery, OP Surgery, and Outpatient MH in the chart above, so these services have all been summed.

8. Continued

Annual 2012 to 2014 Hospital gross cost trend = ($336.41 / $301.63) ^ 0.5 – 1 = 5.6%

(c) Calculate the required increase in hospital inpatient copay to reduce 2014 net cost PMPM by $10, assuming the following. Show your work.

Commentary on Question:
Most candidates had difficulty with the calculations in this part. Some received partial credit for showing the reduction in utilization but could not correctly translate that into the impact on the copay.

From part a, the 2014 gross and net costs are $148.21 and $143.26 respectively for hospital inpatient services.

Revised 2014 Hospital IP utilization after the 5% reduction =
Medical = 120 × 1.0816 × (1 - 5%) = 123.30
Surgical = 100 × 1.0816 × (1 - 5%) = 102.75

The 2014 net cost needs to be $10 less, so $143.26 - $10 = $133.26.

Revised 2014 Gross Cost PMPMs:
Medical = 123.30 × 5,304.50 / 12,000 = $54.50
Surgical = 102.75 × 10,078.55 / 12,000 = $86.30
Total = $140.80

Thus, the value of the 2014 cost sharing needs to be $140.80 - $133.26 = $7.54

To solve for the copay: $7.54 = 226.05 × Z / 12,000 => Z = $400

Since the copay is $250 in 2012, the required increase is $150.

(d) Describe the different retentions on net premium used to calculate gross premiums.

Commentary on Question:
This part again asked candidates to describe, so no credit was given for writing a list of bullet points with no explanations. Candidates needed to identify some of the common retention items used to convert net costs into gross premiums. Candidates who included at least 4 of these items and described them received full credit.

Gross premiums, the premiums actually charged, must account for expected claims as well as a number of other items, generally called "retentions." Some of the most common retention items are the following:

8. Continued

- Expense Loadings: This is usually the largest part of retention, and is generally included as a number of separate charges. These would include salaries, administrative expenses, rent, taxes, etc.
- Pooling Charges: This spreads the cost of any pooled claims over all policy holders. May be included in retention or elsewhere in pricing.
- Profit Charge or Contribution to Free Reserves: This is the profit that the insurer chooses to include in its pricing formula. Non-profit insurers call this "contributions to free reserves." Profit charges may be embedded in other assumptions, so it may or may not be an explicit retention loading.
- Investment Income: Some insurers provide for the crediting of investment income on reserves or other money held, and treats this income as an offset to other retention items.
- Explicit Margin: An insurer may include a specific margin in the retention calculation to reduce the insurer's risk and increase the confidence in the pricing assumptions built into the rates.
- Deficit Recovery Charge: If a policyholder has caused incurred losses by the insurer in prior years, and those losses have not yet been recovered, the insurer may build in a deficit recovery charge intended to recoup past losses within a reasonable period of time.
- Termination Risk Charge: Occasionally, a policyholder in a deficit posi-tion will terminate its contract, leaving the insurer who has chosen a deficit recovery charge philosophy no means to recover the losses from that policyholder. A risk charge may therefore be made in advance on all policyholders in order to finance this business risk.

(e) Calculate the required 2014 premium PMPM based on the new hospital inpatient copayment. Show your work.

Commentary on Question:
Candidates did very well on this section. Full credit was given as long as the candidate used their 2014 net cost from part A (even if it was incorrect), subtracted the $10 as indicated in part c, added on for the pooling charge, and divided by (1 – retention).

Revised 2014 Net PMPM = $317.07 - $10 = $307.07
This is the 2014 Net PMPM from part a, minus the $10 from part c

Adjusted 2014 Total Benefit Cost PMPM = $307.07 + $50 pooling charge = $357.07

Retention items = 15%

2014 Premium PMPM = $357.07 / (1 – 15%) = $420.08

9. Learning Objectives:

1. The candidate will understand how to describe plan provisions typically offered under:
   a. Group and individual medical, dental and pharmacy plans
   b. Group and individual long-term disability plans
   c. Group short-term disability plans
   d. Supplementary plans, like Medicare Supplement
   e. Group and Individual Long Term Care Insurance

Learning Outcomes:

(1a) Describe typical organizations offering these coverages including the historical context.

(1c) Describe each of the coverages listed above.

Sources:

Kongstvedt, Chapter 2

Commentary on Question:

This question was intended to test a student's knowledge of the plans on the healthcare continuum, and an understanding of ACOs and PCMHs.

Solution:

(a) Describe the managed care continuum and the makeup of existing plans from low to high.

Commentary on Question:

Students did well on listing and describing the plan types in the appropriate order. To get full marks a description of the continuum was also required, something missed by most students.

Plans on the continuum start with low complexity, administrative cost, cost and quality control and these elements increase as they move further up the continuum.

- Managed Indemnity – indemnity plans with UM overlay
- PPO – contract with network of providers, in and out of network coverage
- EPO – like PPO but no out of network
- POS – HMO with high cost share indemnity for out of network
- HMO – in network only, gatekeeper approach
  - Open – contract with private physicians
  - Closed – single medical group employed by HMO

9. Continued

(b) Between puffs from his cigar, your uncle expresses interest in hearing more about ACOs.

(i) Describe an ACO.

(ii) Describe the structural requirements of an ACO.

Commentary on Question:
In general, students did well on this part of the question. To get full points more depth was needed in describing the ACO than many students provided.

(i) ACO stands for Accountable Care Organization
- Shared savings program using performance measures
- Written into ACA
- Approach to achieve more integrated and efficient care
- Local organizational accountability for quality and costs

(ii) Structural requirements:
- Can be formed by
  - Group practices
  - Network of individual practices
  - Hospitals
  - Rural health clinics
  - Federally qualified health centers
- Legal entity authorized to conduct business in each state it operates
- Formed for the purpose of:
  - Receiving and distributing shared savings
  - Repaying shared losses
  - Establishing, enforcing healthcare quality criteria
- Governing body
  - 75% board members must by participants
  - Management structure similar to non-profit
- Demonstration of ability to repay losses
  - Purchase of reinsurance
  - Establish line of credit
  - Place funds in escrow

(c) Your uncle has heard about Patient-Centered Medical Homes (PCMH) from a business associate but doesn't fully understand how they work.

(i) List the key characteristics of PCMHs.

(ii) Explain the similarities and differences to HMOs.

9. Continued

Commentary on Question:
Many students did well on the first part of the question, capturing the majority of the key characteristics of a PCMH. The second part of the question required more thought since it required knowledge utilization. Most students did not capture the key similarities and differences between PCMHs and HMOs in their answer.

(i) Key Characteristics

- Ongoing relationship with personal physician
- Personal physician responsible for coordinating care
- Patients receive care from a team
- Patient care integrated across all elements of continuum
- Quality and safety important
- Enhanced access to care
- Payment recognizes added value

(ii) Similarities

- Recognizes team of physicians, medical assistants, RNs, etc. aligned around a PCP
- Enhanced focus on quality monitoring and improvement (NCQA)

Differences

- Value of patient engagement in decision making
  - Role of patient not always clear under gatekeeper/closed panel HMO
  - PCMH mechanism for patients to be more engaged in how/when treated

10. Learning Objectives:

2. The candidate will understand and recommend a manual rate for each of the coverages described in Learning Objective 1.

Learning Outcomes:

(2a) Identify and evaluate sources of data needed pricing, including the quality, appropriateness and limitations of each data source

Sources:

Bluhm, Group Insurance, Chapters 31&36

Commentary on Question:

Commentary listed underneath question component.

Solution:

(a) List and describe the components of gross premiums.

Commentary on Question:

Some candidates supplied an expense formula and received less credit.

- Expected Claim Costs
  - Claims that will be charged to the plan during the contract period
  - Determined using manual or experience rates, with credibility adjustments

- Administrative Expenses
- Commissions and other sales expenses
  - Generally marketed by agents or brokers compensated on a commission basis
  - In addition to commissions, may have other expenses related to sale of product
  - Allocation of expenses attributable to promotion of product, such as advertising to promote brand recognition
    - Generally a % of premiums
- Premium taxes
  - Vary by state, generally 1-3%
  - Assumption for larger groups reflects distribution by state
- Other taxes and fees
  - Federal and state income taxes
  - State sponsored high-risk pool
  - Federal assessment on health coverage under ACA totaling $8 billion in 2014, increasing to $14.3 billion by 2018
  - Small comparative effectiveness research assessment required by ACA
- Contributions to surplus / Risk and Profit Charges
  - Reflect degree of risk involved, the amount of company capital allocated to support the coverage, and return expected on the capital

10. Continued

- Risk varies by group size, benefits provided, funding vehicle, degree of resources required to administer
- Risk often pooled for smaller groups
- Larger groups may have financial arrangements other than full assumption of risk by carrier (ASO, etc)

- Credit for investment income on assets and cash flow
  - Typically thought of assets related to medical reserves and on cash flows
  - Rate of return is generally based on portfolio rate of return
  - Can be reflected as
    - Explicit rate component
    - Offset to expenses
    - Offset to the provision for risk or profit

(b) Outline considerations in developing and allocating administrative expenses.

Commentary on Question:
Many candidates hit the essential points on this section.

- How are expenses allocated to the product?
  - Activity-based allocation
    - Allocates expenses according to some measure or estimate of use for products or functions
    - Example of activity based allocation (postage costs, transfer charges, etc)
  - Functional Expense Allocation
    - Determine how total expenses for an organization are split by major and minor activity categories, line of business, and new and renewal business
    - Survey employees how much time they spend on each category
  - Multiple Allocation Methods
    - A financial report may include both activity and functional expense allocation
- How should administrative expenses be allocated to groups?
  - Primary objective is to achieve equity among group customers without unduly complicating process
    - Sometimes this is secondary to overriding company strategy
  - Expressed on one or more of following bases
    - Percent of premium
    - Percent of claims
    - Per policy
    - Per employee
    - Per claim administered
  - Some particularly demanding customers may have specific charges to provide services (i.e. reporting requirements)

10. Continued

  - Generally preferable to use basis that reflects activities that generate expense
- What does the competition include as expenses in pricing?
  - Adjustments may be necessary to accommodate to marketplace
- Sources of data
  - May be internal or external
  - Internal sources: generally accounting systems (salary, bonuses, rent, postage, travel, etc)
  - External sources: studies by industry associations, published expense data from annual statements, competitive feedback, special surveys

(c) List common rating characteristics and group specific adjustments used in determining and using manual rates for group insurance.

Commentary on Question:
Most candidates received full credit on this section.

- Age
- Gender (often restricted in many products and states)
- Health status (risk adjustment scores)
- Rating tiers/Family Tier
- Geographic factors
- Industry codes
- Group Size
- Length of premium period
- Marketing, competitive, and regulatory issues
- Value of benefits ("Actuarial value")

Rating Characteristics Override/Additional Points
- Group specific adjustments
- New business discounts
- Past or estimated claims experience

(d) Describe the three characteristics which set pricing GLTC apart from other group product pricing.

Commentary on Question:
Candidates struggled to distinguish answers to section d from section e. Full credit was given for viable answers to either section.

- Issue age rated
- Offered as optional coverage
- Unique set of eligible insureds
- Additional credit was given for

10. Continued

- married persons claims lower with built-in caregiver
- shared pool of benefits available for spousal coverage
- restoration of benefits option
- non-forfeiture or contingent non-forfeiture
- voluntary lapses lower than other coverages

(e) Describe key pricing considerations for group long term care which aren't considered in other group pricing.

Commentary on Question:
Candidates struggled to distinguish answers to section d from section e. Full credit was given for viable answers to either section.

- Certification for initial rate filings
  - Rate schedule is sufficient to cover anticipated cost under moderately adverse experience
  - Statement that policy design and coverage have been taken into consideration
  - Statement that underwriting and claims adjudication have been reviewed and taken into consideration
  - A complete description of basis for contract reserves
- Long-term care policies are typically in effect for much longer than other group coverages, with longer payment patterns
- There is much lower participation in GLTC than other products. 5-10% is considered high participation.
- Claims costs often have a very steep slope, requiring pricing projections that last a long time
- LTC is a young industry with long payment periods, so emerging experience is often not fully credible
- Morbidity shifts over time, including morbidity improvement, have been more pronounced in LTC products
- GLTC often has higher start-up expenses as compared to other group coverages

11. Learning Objectives:

3. The candidate will understand how to recommend an employee benefit strategy.

Learning Outcomes:

(3b) Evaluate the elements of cafeteria plan design, pricing and management

(3c) Recommend an employee benefit strategy in light of an employer's objectives

Sources:

Canadian Handbook of Flexible Benefits, Mckay, Ch. 7; The Handbook of Employee Benefits, Rosenbloom Ch. 7

Commentary on Question:

Generally, candidates did well on this question.

Solution:

(a) Describe the similarities and differences between Health Savings Accounts and Health Spending Accounts.

Commentary on Question:

Most candidates performed well in this section. If mistakes were made, they were usually misstatements of some features of either a Health Savings Account or a Health Spending Account.

Similarities

- Both can be used for eligible medical expenses
- Both have tax advantages such as tax free distribution for qualified expenses, as well as tax penalties for misuse
- Both have states/provinces that dictate tax treatments of accounts

Differences

- Spending accounts do not need to be tied to a High Deductible Health Plan
- Eligible expenses broader for Spending Accounts than Savings Accounts
- Spending accounts have only one annual election unless life event. Savings accounts can change elections throughout the year.
- Spending accounts have time-limiting rollover/forfeiture characteristics. Savings accounts do not have limits.
- Savings accounts are owned by the employee (portable), whereas Spending accounts are not.

(b) Calculate the remaining balances after Years 1-3 in your Health Spending Account using the Roll over unused balance approach and then Roll over unpaid claims approach.

11. Continued

Commentary on Question:
In general, candidates did very well on this section. Of mistakes made, a typical one was not to carryover the balance from year 2 to 3 in the rollover unused balance method.

year	Amount	roll over unused balance	roll over unpaid claims
1	$2,000	$2,000	$2,000
	($600)	$1,400	$1,400
	($100)	$1,300	$1,300
	($350)	$950	$950
	($100)	**$850**	**$850**
year-end balance		**$850**	**$0**
2	$1,500	$2,350	$1,500
	($150)	$2,200	$1,350
	($450)	$1,750	$900
	($950)	**$800**	**($50)**
year-end balance		**$800**	**$0**
3	$1,000	$1,800	$950
	($200)	$1,600	$750
	($400)	$1,200	$350
	($300)	**$900**	**$50**
year-end balance		**$900**	**$0**

Please note the following in regard to the calculations above:

- For the rollover unused balance method, there was no forfeiture of the year one rollover amount since over $850 of expenses occurred in year 2; thus, full $800 carries from year 2 to year 3
- For the rollover unpaid claims method, all $850 at the end of year one is forfeited, along with the $50 at the end of year 3.
- For the rollover unpaid claims method, -$50 in claims is carried over from the end of year 2 into the beginning of year 3.

(c) Describe the tax issues of a personal account.

Commentary on Question:
Of the three sections in this question, this one was where candidates did not perform as well.

11. Continued

- Personal accounts can cover many items, ranging from health-related items such as gym memberships to personal items such as gas or vacations.
- Reimbursed items generally count as taxable income to the employee
- Employers tax the account based on the allocations rather than the reimbursements
- Balance remaining in account at year end can be rolled over indefinitely