

GH CORU Model Solutions

Fall 2015

1. 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
6. Evaluate the impact of regulation and taxation on companies and plan sponsors in the U.S.
7. The candidate will understand and evaluate Retiree Group and Life Benefits in the United States.

Learning Outcomes:

- (1d) Evaluate the potential financial, legal and moral risks associated with each coverage.
- (6b) Describe the major applicable laws and regulations and evaluate their impact.
- (7a) Describe why employers offer retiree group and life benefits.
- (7b) Determine appropriate baseline assumptions for benefits and population.
- (7d) Describe funding alternatives for retiree benefits.

Sources:

Group Insurance (6th Edition) Chapter 19

Yamamoto (1st or 2nd Edition) Chapter 7

Commentary on Question:

Question aimed to test the special considerations and challenges in offering group retiree medical coverage as well as the impact of regulation. Calculation tested ability to project claims experience, apply different methods of coordination, and explain results.

1. Continued

Solution:

- (a) List challenges associated with offering a medical insurance plan to retirees that generally do not exist with active employees.

Commentary on Question:

Note: this question was originally aimed more at the employer's considerations, but most candidates also gave answers from an actuarial perspective – not wrong, but not the original intent of the question.

- It is harder to communicate with retirees, because they do not come to work regularly.
 - Many retirees have family physicians that they have been seeing for a long time, making it uncomfortable and difficult to change a primary care provider
 - Some retirees move away from where they worked, and it is difficult to physically meet for a company-sponsored event.
 - Coordination of benefits with Medicare and Medicaid for those that are eligible
 - Actuarial and accounting challenges such as access to relevant and credible data, complex liability calculations and accounting treatment.
- (b) Describe the characteristics of the ideal vehicle for prefunding retiree health benefits.

Commentary on Question:

Fairly straightforward question that most candidates answered correctly but some difficulty when a candidate simply answered "tax advantages" rather than going into greater detail which the solution demanded.

- Current company tax deduction for contributions that adequately fund retiree health benefits;
- A tax-free or tax-deferred savings mechanism for employees;
- Investment earnings that accumulate in a tax-sheltered environment; and
- Tax-free benefits paid to retirees.

1. Continued

- (c) Robson creates a three year forecast with two scenarios: 3% gross trend and 6% gross trend.
- (i) Draft an exhibit to illustrate the impact to net trend for two integration methods using the member claims provided.
 - (ii) Explain the result.

Show your work.

Commentary on Question:

Although the calculations were relatively basic, the majority of candidates did not answer accurately.

- (i) C = Allowed Cost
M = Medicare Covered Cost (assume constant over projection period)
% = Covered Cost after applying benefit provisions (also assume constant)

There are 3 common methods shown below [only need to show 2]

- 1) Standard Coordination of Benefits (COB) = lesser of $C*\%$ and $C - M$; but >0
- 2) Carve Out = $C*\% - M$; but >0
- 3) Exclusion = $(C - M)*\%$; but >0

Table 1: 2014 Cost

| Date | C | M | C - M | C*% | Standard | Carve Out | Exclusion |
|--------------|--------------|--------------|--------------|---------------|------------|------------|-------------------|
| 1/1/14 | 500 | 100 | 500-100=400 | 500-500=0 | 0 | 0 | 400-400=0 |
| 3/1/14 | 1,000 | 600 | 400 | 1000*80%=800 | 400 | 200 | [400-100]*80%=240 |
| 6/1/14 | 2,000 | 1,500 | 500 | 2000*80%=1600 | 500 | 100 | 500*80%=400 |
| TOTAL | 3,500 | 2,200 | 1,300 | 2,400 | 900 | 300 | 640 |

Table 2: 2017 Projection @ 3% gross trend

| Date | C | M | C - M | C*% | Standard | Carve Out | Exclusion |
|--------------|----------------|--------------|--------------|------------------|--------------|---------------|------------------|
| 1/1/17 | 500*1.03^3=546 | 100 | 446 | [546-500]*80%=37 | 37 | 0 | 0 |
| 3/1/17 | 1,093 | 600 | 493 | 874 | 493 | 274 | [493-54]*80%=351 |
| 6/1/17 | 2,085 | 1,500 | 685 | 1,748 | 685 | 1748-1500=248 | 548 |
| TOTAL | 3,825 | 2,200 | 1,625 | 2,660 | 1,215 | 523 | 900 |

1. Continued

Table 3: 2017 Projection @ 6% gross trend

| Claim Date | C | M | C - M | C*% | Standard | Carve Out | Exclusion |
|--------------|--------------|--------------|--------------|------------------|--------------|------------|--------------|
| 1/1/17 | 596 | 100 | 596-100=496 | [596-500]*80%=76 | 76 | 0 | 0 |
| 3/1/17 | 1,191 | 600 | 591 | 1191*80%=953 | 591 | 353 | 469 |
| 6/1/17 | 2,382 | 1,500 | 882 | 2382*80%=1906 | 882 | 406 | 706 |
| TOTAL | 4,169 | 2,200 | 1,969 | 2,935 | 1,549 | 758 | 1,175 |

Table 4: Total Cost Exhibit

| Method | 2014 Actual | 2017P (3%) | Net Trend (3% scenario) | 2017P (6%) | Net Trend (6%) |
|-----------|-------------|------------|--------------------------------------|------------|----------------|
| Standard | 900 | 1,215 | $(1,215 / 900)^{(1/3)} - 1 = 10.5\%$ | 1,549 | 19.9% |
| Carve Out | 300 | 523 | 20.3% | 758 | 36.2% |
| Exclusion | 640 | 900 | 12.0% | 1,175 | 22.4% |

(ii)

- In each case, the net effective trend is greater than the gross trend used in the projection
- This is due to leveraging since the plan deductible (\$500) and Medicare payments are flat

(d) Define “Net Periodic Postretirement Benefit Cost” and list the components.

Commentary on Question:

Most candidates answered question successfully

Net Periodic Postretirement Benefit Cost definition:

- Represents the cost of providing postretirement benefits attributed to the current accounting period.
- Consists of the current year’s cost plus other amounts recognized on a delayed or amortized basis.

The components are:

- Service Cost
- Interest Cost
- Expected Return on Plan Assets
- Amortization of Transition Obligation
- Net Amortization and Deferral
 - Amortization of prior service costs included in accumulated other comprehensive income (AOCI)
 - Amortization of net gain / loss included in AOCI

1. Continued

- (e) List four of the regulations from the Patient Protection and Affordable Care Act that will affect employer-sponsored retiree health plans and describe the expected impact of each.
- 1) Benefit Design requirements (e.g. no lifetime limits, 100% coverage of preventive care services, no pre-existing condition limitations, etc)
 - Most requirements will increase the costs of benefits provided under the plan
 - 2) Reduction in Medicare Advantage (MA) plan payments over time
 - Likely result in higher premium rate increases, lower MA plan benefits, or both.
 - 3) Loss of tax deductibility of the Retiree Drug Subsidy (RDS)
 - Result in higher taxes (lower earnings) if maintained or likely cause plan sponsors to consider alternatives
 - 4) Excise Tax (Cadillac Tax) on high cost plans
 - Most retiree plans will likely become subject to this tax so raises employer expenses or causes them to consider lower benefits or drop coverage (sending retirees to exchanges)

2. Learning Objectives:

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

Learning Outcomes:

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

(6c) Apply applicable standards of practice.

Sources:

Actuarial Standards of Practice

Implications of Individual Subsidies in the Affordable Care Act—What Stakeholders Need to Understand, HealthWatch, May 2014; Bluhm (pg 36, 38).

Bluhm (pg 35)

Commentary on Question:

In general, candidates were familiar with one half of the question, or the other, but rarely both. Comments on individual parts of the question can be found below with that specific part.

Solution:

- (a) Describe guidance for actuaries provided within the Actuarial Standards of Practices (ASOPs) that apply to insured group rate filings.

Commentary on Question:

Candidates had a tendency to list out all of the provisions of one single ASOP in great detail, instead of providing all of the ASOPs that would apply, and a small description of what that ASOP covers. Candidates receive credit for each ASOP and description, up to a maximum of four ASOPs

- ASOP 8 - Guidance to actuaries when performing professional services with respect to preparing or reviewing required regulatory filings related to rates or financial projections for health plan benefits, health insurance, and entities providing health benefits.
- ASOP 21 - Guidance to actuaries when providing professional services while responding to or assisting auditors or examiners in connection with an audit or examination of a financial statement.
- ASOP 23 - Guidance to the actuary in: Selecting the data that underlie the actuarial work product; relying on data supplied by others; reviewing data; using data; making appropriate disclosures with regard to data quality.
- ASOP 25 - Guidance to actuaries when performing professional services with respect to selecting or developing credibility procedures and the application of those procedures to sets of data.

2. Continued

- ASOP 26 -Guidance for actuaries preparing small group health plan rate filing certifications.
 - ASOP 41 -Guidance to actuaries with respect to actuarial communications.
- (b) Identify and describe ACA provisions that contributed to the 2014 renewal calculation.

Commentary on Question:

In general, candidates did very well on this portion of the question. A description of each provision was required in order to receive full credit for that provision. Not all of the provisions below were needed to earn full credit

- Risk Adjustment – an ACA program designed to compensate insurance providers that take on a proportionally greater risk than others in the same market.
 - ACA transitional reinsurance fees – an ACA program designed to protect carriers against claim fluctuations experienced with the large population influx as a result of the individual and employer mandates
 - Dependent age limit has increased to age 26 – Since most policies may have covered dependents up to a younger age this would increase the number of dependents covered and increase rates.
 - Additional regulations and oversight due to ACA would lead to additional administrative costs for the insurance company. Examples include:
 - Patient-Centered Outcomes Research Trust Fund Fee (PCORI)
 - HIP (Health Insurers Tax)
 - Minimum Loss Ratio – The expected loss ratio cannot be below 80%.
 - Individual Mandate – As a result of this potential penalty if a member does not have insurance coverage more employees may enroll in the health plan.
 - Geographic Rating Areas – If the rating areas were changed due to ACA there may be a new area factor developed for the employer’s particular geographic spread.
- (c) The CFO is preparing a multi-year strategic plan and has asked you to explain the implications if Dr. No’s discontinues its health plan in 2020. Assume there are no modifications to the ACA and Dr. No’s employee growth is consistent with current projections.
- (i) Outline additional regulations that Dr. No’s will be subject to in 2020.
- (ii) Calculate the cost impact to Dr. No’s of discontinuing coverage in 2020.

Show your work.

2. Continued

Commentary on Question:

This question was very straight forward, and candidates did well on this. Some candidates forgot to subtract the first 30 members, while others would subtract 20 or 50. Since parts (i) and (ii) were very closely related, if candidates showed knowledge of (i) in their answer of part (ii), then full credit would be received for both. For the calculation, candidates were given credit for an employee count in 2020 that was within reason of the 136 that was projected in the graph.

Additional credit may have been earned for some candidates that also calculated the current cost of Dr. No's coverage, and calculated the savings, though the intention of the question was only to calculate the penalty under the employer mandate. Indexing the annual penalty was not required to receive full credit for the question.

(i)

- Dr No's would be subject to the employer mandate
- Since they are 50 or more employees
- The penalty would be a fee per full-time employee, excluding the first 30 employees from the assessment.

(ii)

- $\$2,000 \text{ annual fee} * (EE - 30) = \text{savings}$

3. Learning Objectives:

2. The candidate will understand and recommend a manual rate for each of the coverages described in Learning Objective 1.
4. The candidate will understand how to describe Government Programs providing Health and Disability Benefits in the U.S.

Learning Outcomes:

- (2a) Identify and evaluate sources of data needed pricing, including the quality, appropriateness and limitations of each data source.
- (4a) Describe benefits and eligibility requirements for Medicare including Part D.
- (4c) Describe benefits and eligibility requirements for Medicaid and Children's Health Insurance Program (CHIP).

Sources:

Essentials of Managed Health Care, Kongstvedt, Chapter 24

Commentary on Question:

Commentary listed underneath question component.

Solution:

- (a) Construct a table to compare and contrast the eligibility and benefit features of different SNPs.

Commentary on Question:

This portion of the question asked candidates to make a table to summarize the eligibility and benefits of the three types of SNPs. Most candidates did well on this section. A few candidates gave information only about eligibility and not about benefits. Both components needed to be answered to receive full credit.

| | Eligibility | Benefits |
|-------------------|---|--|
| Dual Eligible SNP | Enrolls beneficiaries that are eligible for both Medicare and Medicaid | Coordinates between the two programs. New and expanding SNPs must have a contract with the State Medicaid agency to ensure coordination of care. |
| Institutional SNP | Enrolls beneficiaries who are institutionalized in a SNF, NF, ICF/MR, or Psychiatric ward for 90 days | Focus on benefits related to care given within institutions |

3. Continued

| | | |
|------------------|---|---|
| Chronic Care SNP | Enrolls beneficiaries with disabling chronic conditions | Must offer benefits in addition to standard Part A and Part B benefits, as well as specialized cost-sharing |
|------------------|---|---|

- (b) GIC is considering changing its current Skilled Nursing Facility benefit to extend the copay to days 6 through 8. Calculate the largest copay applicable to days 1 through 8 that would reduce GIC's costs by at most \$2 PMPM. Show your work.

Commentary on Question:

Very few candidates got the answer completely correct. Several candidates had elements of the correct solution. Most candidates either omitted the question or did not receive any credit.

Use the information in table 1 to determine the average number of copays per visit under the current and proposed plan design.

| LOS (Days) | Cumulative Frequency | P(LOS) | Number of Copays | |
|------------|----------------------|--------|------------------|----------|
| | | | Current Plan | New Plan |
| 1 | 0.10 | 0.10 | 1 | 1 |
| 2 | 0.17 | 0.07 | 2 | 2 |
| 3 | 0.23 | 0.06 | 3 | 3 |
| 4 | 0.28 | 0.05 | 4 | 4 |
| 5 | 0.33 | 0.05 | 5 | 5 |
| 6 | 0.36 | 0.03 | 5 | 6 |
| 7 | 0.38 | 0.02 | 5 | 7 |
| 8 | 0.40 | 0.02 | 5 | 8 |
| 9-100 | 1.00 | 0.60 | 5 | 8 |

| | | |
|---------------------------|------|------|
| Average # copays per stay | 4.22 | 6.15 |
|---------------------------|------|------|

$$4.22 = 1x.1 + 2x.07 + \dots + 5x.6$$

$$6.15 = 1x.1 + 2x.07 + \dots + 8x.6$$

For the current plan design, the average copay per admit is \$211 = 4.22 * 50

Current plan design SNF copay is worth \$0.50 PMPM.

3. Continued

Proposed plan design SNF copay needs to be worth \$2.50 PMPM (increase in value of copay is cost reduction to GIC)

Therefore need the average copay per admit of $\$1,055 = \$211 * 2.50 / 0.50$

Copay for proposed plan design is \$171.54 = $\$1,055 / 6.15$

- (c) Outline a memo explaining why the company may not encounter the same level of success in Tennessee as it did in Kentucky.

Commentary on Question:

Most candidates were able to identify possible drivers in variance between Tennessee and Kentucky. There are several aspects of the provided data that could differ from the actual situation in the market. Credit was given for a variety of valid answers. The model solution contains examples of valid points, but not all of these had to be listed to obtain full credit. Candidates did not have to write an entire memo, but only had to outline the major points of interest. Some candidates limited their answers by only focusing on the information in the case study, rather than providing a general solution.

Memo to Leadership:

The level of success may vary between Tennessee and Kentucky for the following reasons:

- The given data relates to Kentucky, but the projection is for Tennessee. The two populations may not be representative of each other in terms of demographics and risk score.
- Utilization rates could vary between the two states
- Provider networks could vary drastically between the 2 states, possibly causing differences in the unit costs
- Different competitive environment determines the level of success
- Regulatory environment and required benefits could differ
- Future medical cost and utilization trends could vary

- (d) Describe additional information that GIC should obtain in order to more accurately project its performance in Tennessee.

Commentary on Question:

Most candidates received only partial credit for this section. The question asked candidates to describe recommendations for additional information to gather for its Tennessee projection. Most candidates simply listed items of interest, building off Part C. While this received some points, candidates had to describe why each item would be helpful in order to receive full credit. The model solution contains examples of valid points, but not all of these had to be listed to obtain full credit.

3. Continued

Additional information that should be obtained to more accurately project performance in Tennessee:

- Analysis of Tennessee competitive environment, in order to determine future sales and membership potential
- Analysis of demographic makeup and buyer behavior, in order to make any needed adjustments to the Kentucky data for use in projections
- Tennessee specific provider costs, in order to determine accurate unit costs
- Tennessee specific medical cost and utilization trend rates, to project future years more precisely
- Details on Tennessee regulations and needed benefits, to develop a compliant plan and price in the appropriate benefits

4. Learning Objectives:

4. The candidate will understand how to describe Government Programs providing Health and Disability Benefits in the U.S.

Learning Outcomes:

- (4a) Describe benefits and eligibility requirements for Medicare including Part D.

Sources:

Group Insurance, Bluhm, 6th Edition - Ch. 13 Government Health Care Plans in the United States

GHC-800-13 Medicare's Financial Condition - Beyond Actuarial Balance

Commentary on Question:

In general candidates performed well as a group. Common issues were calculation errors and not providing adequate information in the response to gain full credit.

Solution:

- (a) Calculate the maximum Medicare reimbursement Doctor Trumpet can receive for a typical Medicare-eligible patient. Show your work.

Commentary on Question:

Most students did well on this question. Common errors were around the application of the nationwide conversion factor and load for non-participating providers. Partial credit was given for correctly stating the formula with out performing the calculation.

Reimbursement for each service: $\text{Sumproduct}[\text{Unadj. Units} * \text{Adj.}] * \text{Utilization}$

Reimbursement for Service 1:

$$\{(120 \times 1.2) + (90 \times 1.15) + (45 \times 0.95)\} \times 0.80 = 232.20$$

Reimbursement for Service 2 = 192.20

Reimbursement for Service 3 = 22.19

Reimbursement for Service 4 = 53.63

Total Reimbursement for Services 1 – 4 = 500.21

Nationwide Conversion Factor = 1.45

Load for non-participating providers = 1.0925

Maximum Reimbursement = $500.21 \times 1.45 \times 1.0925 = \792.40

- (b) Explain how Medicare is financed.

Commentary on Question:

In general candidates did well on this question. A common issue for Part C was not describing where the source of the federal funds originate, but rather describing it from the view of the insurer. Another common error was describing the funding sources for Part B/D as a specific tax, rather than general revenues.

4. Continued

- Medicare is financed on a pay-as-you-go basis. There is no pre-funding.
- Hospital Insurance is funding through payroll taxes. The tax is 1.45% of employee earnings with a 1.45% match paid by the employer.
- SMI is financed through contributions from the general treasury as well as beneficiary premiums. General revenues account for approximately 75% of funding, member premiums account for approximately 25%.
- Part D is financed through a separate account within the SMI trust.
- Part C is financed through the same sources as A, B, and D, plus additional member premiums where applicable.

(c) Describe the long-term financing challenges faced by Medicare.

Commentary on Question:

In general, candidates did not perform well on this question. The common mistake was not listing enough challenges to receive full credit. Multiple dates were accepted for the HI depletion date depending on version of source material used.

- The HI fund is expected to be depleted by 2024/2026/2030 because HI expenditures are expected to exceed HI revenues for every year in the future.
- Total Medicare expenditure is growing faster than GDP.
- Population is aging causing more expenditure.
- Slower economic recovery limits the growth of HI and SMI revenue because it results in lower real payroll tax revenues.
- Part B spending is expected to increase as SGR-related physician payments will likely be over-ridden in future years.
- Scheduled reductions in non-physician provider payment rates will not be sustainable in long term; further inflating costs.
- Increase in total Medicare Spending threaten the program's long term sustainability as its share of GDP is expected to grow from 3.6% (2010) to 6%-11% (2085).

(d) Outline some approaches that could improve Medicare solvency.

Commentary on Question:

In general candidates performed very well on this question. The majority of candidates received full points for this question.

4. Continued

- Higher payroll taxes
- Reduce or eliminate some covered services
- Increase Medicare cost sharing
- Increase member premiums
- Increase Medicare eligibility age
- Adjust reimbursement levels for care providers
- Adopt initiatives to lower medical cost trend (e.g. ACO's and/or pay for performance)

5. Learning Objectives:

5. The candidate will understand how to prepare and interpret insurance company financial statements in accordance with U.S. Statutory Principles and GAAP.

Learning Outcomes:

- (5b) Interpret the results of both statutory and GAAP statements from the viewpoint of various stakeholders, including regulators, senior management, investors.

Sources:

Group Insurance, Bluhm, 6th Edition

- Chapter 21 Group Insurance Financial Reporting: United States & Canada: pages 325 - 350

Commentary on Question:

Commentary listed underneath question component.

Solution:

- (a) Describe the types of financial reporting that may need to be provided to:
- (i) Insura's management
 - (ii) Field Hospital

Commentary on Question:

Candidates generally listed out types of financial reports and failed to recognize the role that was specified in the question (manager of the Medical Cost Analysis and Reporting area) and what sorts of reports that type of department would produce. There was also the opportunity to describe reports to Field as a provider and as a policyholder, but most candidates only approached one of the two angles. Candidates generally did a good job at "describing" as opposed to just creating lists for this part of the question.

- (i) **Reporting to Insura's management should cover items such as:**
 - US & Canada: purpose to provide a more accurate picture of the impact of management decisions on the value of the insurer
 - Reasons for managerial financial reports:
 - To measure financial results in alternate ways, such as by product, by cost center, or by strategic business unit.
 - To include projections of future experience, in order to determine the true "value" added by management during a reporting period.
- (ii) **Reporting to Field Hospital as a policyholder may encompass:**
 - Claim experience and enrollments reports

Reporting to Field Hospital as a provider may encompass:

- Provider risk-sharing arrangements and medical management reporting

5. Continued

(b) Draft reports with commentary on the experience for:

- (i) Internal Management
- (ii) Field Hospital as an employer and
- (iii) Field Hospital as a contracted hospital

Show your work.

Commentary on Question:

Candidates had the opportunity to earn points by expanding the table to show per member per month (PMPM) values and subsequent trends, which many did.

Candidates generally failed to distinguish between subparts i, ii, and iii and how the reports should differ for the respective audiences or to recognize that Field Hospital's claims experience for the entire network.

Basic report – showing the work

| | Prior Year Utilization/1000 | Current Year Utilization/1000 | Prior Year Unit Cost (Allowed) | Current year Unit Cost (Allowed) | Utilization Trend | Cost Trend | Prior year PMPM | Current year | Total Trend |
|-----------------------------|-----------------------------|-------------------------------|--------------------------------|----------------------------------|-------------------|------------|-----------------|--------------|-------------|
| Hepatitis C Drug Treatment | 96 | 88 | \$750 | \$8,125 | -8% | 983% | \$6.00 | \$59.58 | 893% |
| Durable Medical Equipment | 45 | 48 | \$733 | \$737 | 7% | 1% | \$2.75 | \$2.95 | 7% |
| Anesthesiology (outpatient) | 100 | 105 | \$900 | \$943 | 5% | 5% | \$7.50 | \$8.25 | 10% |
| Readmission | 2.7 | 4.3 | \$23,000 | \$23,500 | 59% | 2% | \$5.18 | \$8.42 | 63% |

- (i)
- To: Internal Management
 From: Candidate
 RE: Commentary on Experience

The purpose of this memorandum is to comment on the experience observed in the provider network. The following items were observed:

5. Continued

- Total trend for the hepatitis C drug treatment was 893%, which was driven by a 983% increase in the allowed cost per unit.
- Total trend for readmissions was 63%, which was driven by a 59% increase in utilization.
- Trends for anesthesiology and durable medical equipment were 10% and 7%, respectively.

The total costs are increasing, driven mainly by the hepatitis C drug costs and the readmission rates. These costs should be compared against internal pricing methods to insure that our pricing assumptions are accurate.

(ii)

To: Field Hospital
From: Candidate
RE: Commentary on Field Hospital Experience as an Employer

The purpose of this memorandum is to comment on the experience observed in the provider network for Field Hospital as an employer. Further work will to be done to show claims experience for only Field Hospital since there is a need know if there is specific utilization for that hospital and if there are any implications for reserving or trend.

The following items for the network as a whole were observed:

- Total trend for the hepatitis C drug treatment was 893%, which was driven by a 983% increase in the allowed cost per unit.
- Total trend for readmissions was 63%, which was driven by a 59% increase in utilization.
- Trends for anesthesiology and durable medical equipment were 10% and 7%, respectively.

The total costs are increasing, driven mainly by the hepatitis C drug costs and the readmission rates. Because of this increase in claims, the reserves for this group will need to reevaluated and possibly increased.

(iii)

To: Field Hospital
From: Candidate
RE: Commentary on Field Hospital Experience as a contracted hospital

5. Continued

The purpose of this memorandum is to comment on the experience observed in the provider network for Field Hospital as a contracted hospital. The hospital has a risk sharing arrangement, which would only show the readmission portion of the report that was given to Field Hospital as an employer. For the entire provider network, total trend for readmissions was 63%, which was driven by a 59% increase in utilization.

Further work will be done to show readmission experience for only Field Hospital. Included in this future reporting will be information regarding the provider risk-sharing arrangements and medical management reports. I recommend having the risk sharing linked to utilization or average cost per member, which can be done with stop loss insurance.

6. 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.
5. The candidate will understand how to prepare and interpret insurance company financial statements in accordance with U.S. Statutory Principles and GAAP.
6. Evaluate the impact of regulation and taxation on companies and plan sponsors in the U.S.

Learning Outcomes:

- (1a) Describe typical organizations offering these coverages.
- (1c) Describe each of the coverages listed above.
- (1d) Evaluate the potential financial, legal and moral risks associated with each coverage.
- (2a) Identify and evaluate sources of data needed pricing, including the quality, appropriateness and limitations of each data source.
- (2c) Calculate and recommend assumptions.
- (2d) Calculate and recommend a manual rate.
- (2e) Identify critical metrics to evaluate actual vs. expected results.
- (2f) .Describe the product development process including risks and opportunities to be considered during the process.
- (2g) Apply actuarial standard of practice in evaluating and projecting claim data.
- (5a) Prepare a financial statement in accordance with generally accepted accounting principles.
- (5b) Interpret the results of both statutory and GAAP statements from the viewpoint of various stakeholders, including regulators, senior management, investors.

6. Continued

- (5c) Apply applicable standards of practice.
- (6a) Describe the regulatory and policy making process in the U.S.
- (6b) Describe the major applicable laws and regulations and evaluate their impact.
- (6c) Apply applicable standards of practice.

Sources:

Chapter 31 / Bluhm

Chapter 34 / Bluhm

Commentary on Question:

Commentary listed underneath question component.

Solution:

- (a) Describe the pricing components, other than claims cost, of group disability manual rates.

Commentary on Question:

Many candidates here provided a thorough list describing many of the pricing components that contribute to claims cost such as group size, occupation type, income level, social security offsets, etc. This is not what the question asked for. Candidates that described the different types of non-claim items that impact rates (administrative expenses, taxes/fees, commissions, investment income, etc.) did fairly well on this question.

Once claim costs are determined, several non-claim components must be applied to claims in order to develop the final rates. This includes fixed costs related to product development that must be recouped, ongoing administrative costs, agent and broker commissions, taxes and/or fees, risk and/or profit margins, as well as any investment income offsets.

As this LTD product is new, there are likely several fixed costs related to designing, developing, marketing and underwriting the product. Depending on the projected enrollment, it may be difficult to appropriately amortize these costs over the entire block. Ongoing administrative expenses are a variable cost, and can be better priced as a percent of premium, a percent of claims, or a per group or per certificate amount.

6. Continued

Commissions are typically priced as a percentage of premium, and are typically level between first and renewal years. Taxes are also typically added on as a percent of premium, although some fixed fees may need to be accounted for, as well. To offset these expenses, the insurer may apply an investment income credit due to anticipated income on assets and cash flows from IBNR and reserves on claims not yet due.

Finally, the final rates should also include a profit/contribution to surplus margin. This margin may reflect the risk of the group: smaller groups with more fluctuation may dictate a higher risk margin while larger, more stable groups would require a smaller margin against adverse claim deviations.

- (b) Calculate the dollar and percentage impact of the error to total revenue, claims, expenses, and profit margin. Show your work.

Commentary on Question:

Very few candidates received full credit for this question, as there were numerous opportunities to make mistakes when revising multiple items in the pro forma financial statements over two years. At the same time, most candidates received significant partial credit for this question by making an attempt at answering it and providing a reasonable explanation of how each piece of the pro forma would be impacted. There are several reasonable explanations regarding how revenue and premium taxes would be impacted by these errors, and these were all considered for full credit.

The most common errors on this question were failing to apply the correction to only LTD revenue and LTD claims, as well as failing to address how premium tax and commissions (which are tied to premium) would be impacted. Several candidates incorrectly applied the correction to the medical product.

| | | | | | % |
|---------------------|-----------------|--------|-----------------|--------------|--------------|
| | Original | Impact | Revised | \$ Change | Change |
| 2015 Revenue | | | | | |
| Non-LTD Revenue | \$76,000 | None | \$76,000 | \$0 | 0% |
| LTD Revenue | \$4,000 | x 1.2 | \$4,800 | \$800 | 20% |
| Other Revenue | \$6,000 | None | \$6,000 | \$0 | 0% |
| 2015 Revenue | \$86,000 | | \$86,800 | \$800 | 0.93% |

6. Continued

| | Original | Impact | Revised | \$ Change | % Change |
|--------------------|-----------------|--------|-----------------|--------------|--------------|
| 2015 Claims | | | | | |
| Non-LTD Claims | \$65,000 | None | \$65,000 | \$0 | 0% |
| LTD Claims | \$2,800 | x 1.2 | \$3,360 | \$560 | 20% |
| 2015 Claims | \$67,800 | | \$68,360 | \$560 | 0.83% |

| | Original | Impact | Revised | \$ Change | % Change |
|----------------------|-----------------|--------|-----------------|--------------|--------------|
| 2015 Expenses | | | | | |
| Total Claims | \$67,800 | | \$68,360 | \$560 | 0.83% |
| Non-LTD Comm. | \$1,800 | None | \$1,800 | \$0 | 0% |
| LTD Comm. | \$200 | x 1.2 | \$240 | \$40 | 20% |
| General Admin | \$12,000 | None | \$12,000 | \$0 | 0% |
| Premium Taxes (LTD) | \$1,600 | x 1.2 | \$1,920 | \$320 | 20% |
| 2015 Expenses | \$83,400 | | \$84,320 | \$920 | 1.10% |

| | Original | Impact | Revised | \$ Change | % Change |
|---------------------------|----------------|--------|----------------|----------------|---------------|
| 2015 Profit Margin | | | | | |
| 2015 Revenue | \$86,000 | | \$86,800 | \$800 | 0.93% |
| 2015 Expenses | \$83,400 | | \$84,320 | \$920 | 1.10% |
| 2015 Profit Margin | \$2,600 | | \$2,480 | (\$120) | -4.62% |

| | Original | Impact | Revised | \$ Change | % Change |
|---------------------|------------------|--------|------------------|----------------|--------------|
| 2016 Revenue | | | | | |
| Non-LTD Revenue | \$86,000 | None | \$86,000 | \$0 | 0% |
| LTD Revenue | \$8,000 | x 1.2 | \$9,600 | \$1,600 | 20% |
| Other Revenue | \$7,000 | None | \$7,000 | \$0 | 0% |
| 2016 Revenue | \$101,000 | | \$102,600 | \$1,600 | 1.58% |

| | Original | Impact | Revised | \$ Change | % Change |
|--------------------|-----------------|--------|-----------------|----------------|--------------|
| 2016 Claims | | | | | |
| Non-LTD Claims | \$73,000 | None | \$73,000 | \$0 | 0% |
| LTD Claims | \$5,700 | x 1.2 | \$6,840 | \$1,140 | 20% |
| 2016 Claims | \$78,700 | | \$79,840 | \$1,140 | 1.45% |

6. Continued

| 2016 Expenses | Original | Impact | Revised | \$ Change | % Change |
|----------------------|-----------------|--------|-----------------|----------------|--------------|
| Total Claims | \$78,700 | | \$79,840 | \$1,140 | 1.45% |
| Non-LTD Comm. | \$2,000 | None | \$2,000 | \$0 | 0% |
| LTD Comm. | \$400 | x 1.2 | \$480 | \$80 | 20% |
| General Admin | \$13,000 | None | \$13,000 | \$0 | 0% |
| Premium Taxes (LTD) | \$1,900 | x 1.2 | \$2,280 | \$380 | 20% |
| 2016 Expenses | \$96,000 | | \$97,600 | \$1,600 | 1.67% |

| 2016 Profit Margin | Original | Impact | Revised | \$ Change | % Change |
|---------------------------|----------------|--------|----------------|------------|--------------|
| 2016 Revenue | \$101,000 | | \$102,600 | \$1,600 | 1.58% |
| 2016 Expenses | \$96,000 | | \$97,600 | \$1,600 | 1.67% |
| 2016 Profit Margin | \$5,000 | | \$5,000 | \$0 | 0.00% |

Alternate solutions:

- Increase LTD Revenue (and Commissions and Premium Taxes) by 1.12 instead of 1.20, since 40% of the business has already been sold.
- Increase Premium Taxes by less than 1.2, since it is not clear that the entire premium tax amount is related to LTD business.

(c) Recommend an action plan to correct the error with:

- Insurance departments
- Internal departments and business partners
- Existing and prospective customers

Identify relevant guidance from the applicable ASOPs.

Commentary on Question:

Most candidates gave reasonable responses that addressed sufficiently the issue with all three stakeholders. However, to receive full credit, it was necessary to detail how a couple of different internal departments and business partners would be impacted. Most candidates did not identify that the legal/compliance area should be involved, and only a handful of candidates identify that the finance area should be involved regarding updated financial projections or marketing regarding the ongoing sales of the product. Finally, many candidates did not invoke any mention of any ASOPs that were applicable.

6. Continued

Of those that did, most correctly identified ASOPs 8, 23 and 41 as the most important. Only a few further described the sections of the ASOPs that were relevant to the process of identifying the scope of the error and the corrective action plan.

- (i) It is necessary to contact the DOI's in both states where the filings have been approved and where filings are still pending. This should be done in cooperation with Royal Life's compliance or legal department, as they may have a better understanding of state regulations and relationships with each state's insurance department. Where an approved or pending filing is allowed to be amended, Royal Life should put into place an action plan to resubmit these filings or file amendments with appropriate documentation. In doing so, the actuary should adhere to ASOP 8, Rate Filings for Accident & Health Insurance. This ASOP describes how the actuary should review the laws/regulations of each state, determine which assumptions would have led to the correct factor of 1.20, and disclose what other parts of the rate filing were affected by the error (and what reliances may have led to them). ASOP 41, Actuarial Communications, also applies to all communications with the DOI. This ASOP requires that the actuary clearly communicate that the error was discovered after the filings were submitted, the materiality of the error, and responsibility for any revised assumptions.
- (ii) Once an action plan is agreed upon after consulting with the DOI's and legal/compliance, all downstream internal departments and business partners should be alerted. Sales and marketing should be informed whether sales can continue and if materials need to be reproduced. Finance should be provided with updated inputs so revised pro forma financial statements can be produced. Brokers and agents should be provided with updated talking points. In correcting this error and in future filings, the actuary should adhere to ASOP 23, Data Quality. The actuary should review all assumptions for appropriateness and reasonability (full audit not required). Such a review may have caught this error before the initial filings were submitted to the DOI. ASOP 41 applies to all communications internally, as well (both written and oral).
- (iii) Finally, Royal Life needs to determine whether the rate will be corrected and for whom. For example, will unsold quotes using the old, incorrect assumptions be honored? Once these rating decisions are made, any customers who are impacted must be informed as soon as possible.

7. Learning Objectives:

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

Learning Outcomes:

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

Sources:

GHC-808-15: Affordable Care Act Risk Adjustment: Overview, Context, and Challenges

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

GHC-810-15: Risk Transfer Formula for Individual and Small Group Markets Under the Affordable Care Act

Commentary on Question:

Commentary listed underneath question component.

Solution:

- (a) Explain how ACA risk adjustment is designed to promote competitive premium offerings in the small group marketplace.

Commentary on Question:

A common mistake made by candidates was listing or discussing general facts about the risk adjustment program or transfer formula and not explaining how it promotes competitive premium.

Premiums should reflect differences in benefits, quality and efficiency and not the health status of the enrolled population.

Without risk adjustment, plans that attract a high proportion of high risk enrollees would have to charge a higher average premium. With risk adjustment, plans will be compensated by the risk adjustment program if they attract a higher than average level of risk. Therefore, premium does not need to increase based on the expected high risk population of a block of business. This stabilizes premium in the marketplace.

- (b) Describe the rationale for developing a Commercial Risk Adjustment model rather than applying the Medicare Advantage Risk Adjustment model.

Commentary on Question:

Many candidates were successful and able to discuss items related to each of the three key categories in the model solution. A number of additional points of reasoning were also acceptable, in particular type of spending, beyond the answers included below.

7. Continued

Differences related to **prediction year** and **population** are the key reasons using a separate model for Commercial Risk Adjustment is appropriate. Rationale detailing each of these key points is described below:

Prediction year

- Medicare HCC risk adjustment model uses base year diagnoses and demographic information to predict the next year's spending
- Commercial risk adjustment model uses current year diagnoses and demographics to predict current year spending

Population

- Medicare based on aged (>65) and disabled (<65) populations
- Medicare population has low volume of certain conditions more prevalent in commercial populations (e.g., pregnancy and neonatal complications)

- (c) Calculate the risk adjustment transfer amount for L&B. Show your work.

Commentary on Question:

Many candidates knew the risk adjustment transfer formula and were successful in performing the necessary calculations. Providing the transfer amount as a PMPM or total dollar amount were both acceptable. Answers varied due to rounding, which was acceptable as long as the appropriate steps were taken to perform the calculation. Some common mistakes made by candidates included miscalculating the market share or enrollment-weighted averages, inappropriately including the tobacco factor as an allowable rating factor and using the wrong statewide average premium to calculate the total transfer amount.

| Data Provided | L&B | All Other |
|----------------------------------|----------|-----------|
| Billable member months | 1,244 | 7,412 |
| Premium (PMPM) | \$323.00 | \$375.00 |
| Actuarial value (AV) | 0.80 | 0.70 |
| Age rating factor (ARF) | 1.22 | 1.44 |
| Geographic cost factor (GCF) | 1.17 | 1.17 |
| Induced demand factor (IDF) | 1.08 | 1.03 |
| Plan liability risk score (PLRS) | 1.32 | 1.28 |

Risk adjustment transfer amount = (Left-side – Right-side) * Statewide Average Premium * Billable Member Months, where:

- Left-side = $(\text{PLRS} * \text{IDF} * \text{GCF}) / \text{Enrollment-weighted average (PLRS} * \text{IDF} * \text{GCF)}$
- Right-side = $(\text{AV} * \text{ARF} * \text{IDF} * \text{GCF}) / \text{Enrollment-weighted average (AV} * \text{ARF} * \text{IDF} * \text{GCF)}$

7. Continued

L&B market share = $1,244 / (1,244 + 7,412) = 14.4\%$

All Other market share = $7,412 / (1,244 + 7,412) = 85.6\%$

Statewide average premium = $\$323.00 * 14.4\% + \$375.00 * 85.6\% = \mathbf{\$367.53}$

Transfer formula left-side:

- L&B PLRS*IDF*GCF: $1.32 * 1.08 * 1.17 = 1.668$
- All Other PLRS*IDF*GCF: $1.28 * 1.03 * 1.17 = 1.543$
- Enrollment-weighted average: $1.668 * 14.4\% + 1.543 * 85.6\% = 1.561$
- Left-side result = $1.668 / 1.561 = \mathbf{1.069}$

Transfer formula right-side:

- L&B AV*ARF*IDF*GCF: $0.80 * 1.22 * 1.08 * 1.17 = 1.233$
- All Other AV*ARF*IDF*GCF: $0.70 * 1.44 * 1.03 * 1.17 = 1.215$
- Enrollment-weighted average: $1.233 * 14.4\% + 1.215 * 85.6\% = 1.218$
- Right-side result = $1.233 / 1.218 = \mathbf{1.012}$

L&B Transfer Amount = $(1.069 - 1.012) * \$367.53 * 1,244 = \$26,061$

- (d) Outline a memo to leadership describing the impact of ACA risk adjustment and subsequent action planning.

Commentary on Question:

Candidates who provided a response were generally successful in making observations based on their findings from part C and provided meaningful suggestions for future action planning. No points were lost if the numerical result found in part C was incorrect, as long as the candidate was able to describe the impacts in a way that were consistent with their result. Additional observations and action planning recommendations were acceptable, beyond those included in the model solution. A common mistake made by candidates included discussing the risk adjustment transfer formula and factors or other general facts about the program and not making comments specific to L&B's results.

An outline of key points to include in a memo to L&B Leadership about the impact of risk adjustment would include:

Impact of ACA Risk Adjustment

- After adjusting for risk adjustment, L&B's results improve but are still running higher than the expected (pricing) loss ratio.

7. Continued

Action Planning

- L&B should review medical management programs to see if high risk patients are being managed effectively.
- L&B should also consider the impact of the risk corridor program on the results of their business.

8. Learning Objectives:

5. The candidate will understand how to prepare and interpret insurance company financial statements in accordance with U.S. Statutory Principles and GAAP.

Learning Outcomes:

- (5b) Interpret the results of both statutory and GAAP statements from the viewpoint of various stakeholders, including regulators, senior management, investors.

Sources:

Group Insurance Chapters 37 & 45, Higgins Chapter 4

Commentary on Question:

Commentary listed underneath question component.

Solution:

- (a) Calculate the following pre- and post-merger financial metrics for each year from 2014 to 2016:

- ROE
- Net margin
- Dividend growth rate

Show your work.

Commentary on Question:

Many candidates calculated ROE incorrectly by using Pre-Tax Profits in the numerator. And for the Net Margin calculation, many candidates did not exclude Investment Income from Revenue in the denominator. Given the many calculations required to obtain the correct mathematical answers partial credit was not given for just stating a formula. The question asked candidates to "Show your work" so candidates were expected to do so in order to receive credit.

- (i) ROE

$$\text{ROE} = (\text{Net Income}) / (\text{Avg. Equity})$$

Where Net Income = (Total Revenue – Total Expenses) x (1-Tax Rate)

Avg. Equity was provided

The Merged Company had a 20% reduction in Admin Expense

Expense Savings = 20% of (Retro Admin + Prospero Admin)

Net Income Effect = (1- Tax Rate) x Expense Savings

8. Continued

| | 2014 | 2015 | 2016 |
|-------------------|--------------|--------------|--------------|
| Retro Life | | | |
| Net Income | 5200 | 9230 | 9750 |
| Avg Equity | 43700 | 71100 | 103200 |
| ROE | 11.9% | 13.0% | 9.4% |
| Prospero A&H | | | |
| Net Income | 7150 | 12025 | 15340 |
| Avg Equity | 64200 | 121400 | 149000 |
| ROE | 11.1% | 9.9% | 10.3% |
| Merged Co. | | | |
| Adj to NI for Exp | 4810 | 5850 | 6890 |
| Net Income | 17160 | 27105 | 31980 |
| Avg Equity | | 188000 | 247000 |
| ROE | | 14.4% | 12.9% |

(ii) Net Margin = (Net Income) / (Total Revenue w/o Investment Income)

| | | | |
|-------------------|-------------|-------------|-------------|
| Retro Life | | | |
| Net Income | 5200 | 9230 | 9750 |
| Rev w/o Inv Inc | 105000 | 130000 | 140000 |
| Net Margin | 5% | 7.1% | 7.0% |
| Prospero A&H | | | |
| Net Income | 7150 | 12025 | 15340 |
| Rev w/o Inv Inc | 170000 | 230000 | 270000 |
| Net Margin | 4.2% | 5.2% | 5.7% |
| Merged Co. | | | |
| Net Income | 17160 | 27105 | 31980 |
| Rev w/o Inv Inc | 275000 | 360000 | 410000 |
| Net Margin | 6.2% | 7.5% | 7.8% |

(iii) Dividend Growth Rate = $\text{Dividend}_t / \text{Dividend}_{t-1}$
 Where Dividend Pre-Merger = Net Income x Dividend Rate
 Dividend Rate = 1 – Retained Earnings Rate
 Dividend Post-Merger = Retro Dividend + Prospero Dividend

| | | | |
|------------------------------------|------|--------------|--------------|
| Retro Life (Dividend Rate = 60%) | | | |
| Dividend | 3120 | 5538 | 5850 |
| Div Growth Rate | | 77.5% | 5.6% |
| Prospero A&H (Dividend Rate = 70%) | | | |
| Dividend | 5005 | 8418 | 10738 |
| Div Growth Rate | | 68.2% | 27.6% |
| Merged Co. | | | |
| Dividend | 8125 | 13956 | 16588 |
| Div Growth Rate | | 71.8% | 18.9% |

8. Continued

- (b) Critique if the post-merger financial metrics from (a) achieve targets. Justify your position.

Commentary on Question:

Most candidates compared the ROE and Net Margins they calculated in part A to the given 15% and 5% targets. They were given (small) partial credit for those 2 comparisons. Most candidates did not “Justify your position” or “Critique” further than those 2 comparisons.

Targets (given): ROE > 15%, Net Margins > 5%

ROE: The ROE in the Merged Company is projected to be less than 15% so it does not meet the target. However, the ROE in the Merged Company is projected to be greater than the projected ROE's in the stand-alone companies so the merger could make sense if there are other reasons to do so. The projected ROE is higher in the Merged Company because of the expected savings in Administrative Expenses.

Net Margin: The Net Margin in the Merged Company is projected to be greater than 5% so it does meet the target. The reduction in Administrative Expenses helped increase the post-merger Net Margin. Based solely on Net Margin, one could argue that Retro did not need to merge because its Net Margin was already projected to be above 5% and only slightly less than the post-merger margins. Prospero also had Net Margins projected to be in excess of 5% so it did not need the merger to meet its target (from the Net Margin perspective).

Dividend Growth Rate is projected to be higher post-merger but it is uneven. Growth should be more consistent.

Other financial measures to consider in a merger situation would be Asset Turnover and Leverage.

Asset Turnover = Sales / Assets; post-merger is not materially different than pre-merger.

Leverage = Assets / avg Equity; post-merger is not materially different than pre-merger.

- (c) Recommend changes to rating methods to improve the sustainable growth rate of the merged company.

8. Continued

Commentary on Question:

Most candidates listed ways to improve the Sustainable Growth Rate in general but the question asked the candidates to recommend changes to “rating methods” to improve the SGR. Some points were given if the candidate understood the relationship between the SGR and the actual growth rate. But full credit was only given if the candidate mentioned ways to improve the SGR using rating methods.

$$\text{SGR} = g = \text{PRAT}$$

Where: P = Profit Margin

R = Retained Earnings %

A = Asset Turnover

T = Assets : Equity (ratio)

Sales growth should be in line with the change in R x ROE

Two factors impacting rating methods include Expenses and Margins. The Merged Company may want to revisit administrative expense allocations given expenses are 20% lower in the Merged Company. The Loss Ratio for Prospero groups is increasing so adding higher Explicit Margins for these groups should be considered.

9. Learning Objectives:

4. The candidate will understand how to describe Government Programs providing Health and Disability Benefits in the U.S.

Learning Outcomes:

- (4c) Describe benefits and eligibility requirements for Medicaid and Children's Health Insurance Program (CHIP).

Sources:

Sources: Kongstvedt, 6th Edition, CH 25 pp. 536-538, Page 546

Bluhm Ch 14 p198, Ch 15 p229

Commentary on Question:

Commentary listed underneath question component.

Solution:

- (a) Describe the types of waivers and approval processes for alternative Medicaid programs.

Commentary on Question:

This question asked for a description of the types of waiver programs, not just a list. Partial credit was given if a candidate could list the programs and give a brief definition to indicate a basic understanding of the purpose of the different programs.

Federal Waiver Authority - Various authorities have the ability to allow states flexibility in operating Medicaid programs

- Section 1115 – Research and Demonstration projects
 - Provides Health and Human Services (HHS) broad authority to approve projects that test policy innovations likely to further the objectives of Medicaid
 - Application submitted by state Medicaid agency to CMS
 - Work collaboratively with CMS to develop program
 - Subject to CMS, OMB, HHS approval
 - No specific timeframe requirements for approval
- Section 1915(b) – Managed Care / Freedom of Choice Waivers
 - Provides HHS authority to grant waivers to allow states to implement managed care delivery systems or otherwise limit provider choice
 - Must demonstrate program is cost effective and show Federal expenditures are not greater under the waiver.

9. Continued

- Section 1915(c) – Home and Community Based Services Waiver
 - Provides HHS authority to allow long term care services to be delivered in a community setting
 - Alternative for providing comprehensive long term care in institutional settings
 - Can be targeted (e.g. seniors, physical disabilities, HIV/AIDS)
 - Must be “cost neutral”, or costs cannot be greater than if an individual had resided in an institution
 - State Medicaid agency submits application to CMS
 - Program requirements:

Demonstrate waiver services to targeted population are no more costly than cost of services in an institution

Ensure measures taken to protect health and welfare of consumers

Provide adequate and reasonable provider standards

Ensure that services are provided in accordance to a plan of care

- (b) List the changes to Federal Medicaid guidelines from the ACA.

Commentary on Question:

Most candidates knew that the ACA expanded Medicaid to 133% of the FPL.

Many candidates went on to talk about the Supreme Court and the states option to expand which wasn't part of the question.

- Expanded program to all non-Medicare eligible individuals with income up to 133% of FPL
- Provisions for quality improvements
- Provides higher payments for primary care services (for limited time period)

- (c) List common requirements imposed on firms providing utilization management services to HMOs.

Commentary on Question:

This was a straightforward list question about utilization management or utilization review taken from the section of the syllabus regarding regulating HMOs. These regs would also apply to HMOs used in a managed Medicaid setting.

- Restrictions on the use of UR procedures and criteria used by firms
- Restrictions on the type or qualifications of personnel to qualify for licensure to carry out UR
- Payments to providers for the cost of responding to requests for information
- Mandates on the hours of operation

9. Continued

- Restrictions on access to medical information
 - Restrictions on the location at which UR must be performed
 - Burdensome regulatory filings of UR data;
 - Requirements that medical necessity denials be made by a physician in the same or similar specialty as the attending physician; and
 - Requirements that the physician making the UR determination be licensed in the state where the member resides.
- (d) List components of effective LTC care management programs and the role of care managers for each component.

Commentary on Question:

In the source material below, there are multiple elements that contribute to an effective LTC care management program. While broad population, benefits, program authority and design and rate design are important elements, care managers aren't involved in those elements. The question called for a list and a description of the role of care managers also. Partial credit was given if the items were listed only.

- a. Clinical Delivery – Develop comprehensive care plans and work with multiple providers
 - b. Identification and intervention – face to face comprehensive assessment
 - c. Comprehensive Care Management developing a care plan that ties primary care to specialty care.
 - d. Transition Management – understand each individual's circumstance and needs
 - e. Network Development and Increased Access no impact.
- (e) Calculate the maximum amount the state can spend on community care workers to have the waiver approved. Show your work.

9. Continued

Demonstrate that the waiver services to the target population are no more costly than the cost of services these individuals would receive in an institution.

| Care Category | Current LTC PMPM | Proposed Waiver Changes | LTC PMPM After Waiver Changes |
|---------------------------|------------------|-------------------------|-------------------------------|
| Acute Inpatient | \$275.00 | 0.90 | \$247.50 |
| LTC | \$150.00 | (1.0*.8+0.7*.2) | \$141.00 |
| Outpatient Emergency Room | \$80.00 | 0.85 | \$68.00 |
| Outpatient Other | \$120.00 | 1.00 | \$120.00 |
| Physician Care | \$220.00 | 1.08 | \$237.60 |
| Pharmacy Costs | \$95.00 | 1.18 | \$112.10 |
| Total | \$940.00 | | \$926.20 |

Most that can be spent on community care workers is $\$940 - \$926.20 = \$13.80$ PMPM.

$\$13.80 * 750,000 * .17 * 12 = \21 million.

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:

- (2c) Calculate and recommend assumptions.
- (2d) Calculate and recommend a manual rate.
- (2g) Apply actuarial standard of practice in evaluating and projecting claim data.

Sources:

Group Insurance, Chapters 31 and 33, ASOP 23, and Case Study

Commentary on Question:

Candidates must understand ASOP 23. Candidates must apply that knowledge and both critique a rating methodology AND recommend a preferred approach. The critique and recommendation should be separate items.

Solution:

- (a) Describe the application of ASOP 23 to the rate development.

ASOP 23 is about data quality. When selecting data for the rate development the actuary should:

- Consider the data elements needed
- Decide if the data is appropriate for the analysis
- Review reasonableness, comprehensiveness, and consistency of the data
- Understand material limitations of the data
- Consider alternative data sources – cost and benefits of the data, along with feasibility of obtaining the data in a reasonable time frame
- Describe sampling methods, if used to collect the data
- Disclose reliance on data provided by others
- Review the data for any defects

- (b) Critique the manual rate methodology suggested and recommend a preferred approach. Justify your response.

Commentary on Question:

Critique should be listed separately from the recommendation, or the recommendations should be clearly stated within the critique.

10. Continued

Critique:

- Paid claims were not completed which will understate actual costs.
- Did not adjust for difference in HMO and PPO data, such as provider network, utilization management, demographics, and benefits.
- A full calendar year was not used, which introduces seasonality issues and deductible/out-of-pocket maximum accumulator issues.
- Individual experience is not necessarily representative of small group.
- No demographic adjustments were made for assumed changes in the population.
- Trend only included unit cost changes, not utilization changes.

Recommendation:

- Use full year Jan 2014 – Dec 2014
- Use small group
- Use incurred claims
- Use unit cost and utilization trends
- Can use HMO and PPO, but adjust for differences between the two
- Apply demographic adjustments to reflect expected population

11. Learning Objectives:

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

Learning Outcomes:

- (2c) Calculate and recommend assumptions.
- (2d) Calculate and recommend a manual rate.

Sources:

Case Study, Bluhm Chapters 33 and 38

Commentary on Question:

This question asks candidates to calculate and recommend a manual rate for each of the coverages described. Candidates had to use formulas from the text and information provided in the question and case study to calculate the manual rate.

Solution:

- (a) Calculate for each service category:
 - (i) Expected annual utilization per 1,000 members in 2016
 - (ii) Allowed cost per service in 2016

Show your work.

Commentary on Question:

Part a required calculating trends based on the case study and trending two years forward. Some candidates used the Individual table from the case study instead of the Small Group table. Candidates also missed points if they didn't use the two year trend calculated from the case study.

2016 values

Util/1000

Inpatient:

Trend rate to use: 0% (no incr. over 2014)

Formula: $2016 \text{ Util} = 2014 \text{ Util} * (1 + \text{Trend})^2$

$2016 = 281 \times (1 + 0\%)^2 = 281$

Outpatient:

Trend rate to use: 0% (no incr. over 2014)

Formula: $2016 \text{ Util} = 2014 \text{ Util} * (1 + \text{Trend})^2$

$2016 = 1,325 \times (1 + 0\%)^2 = 1,325$

11. Continued

Physician:

Trend rate to use: historical 2012 to 2014 annual trend, plus 2%

Historical trend: $(15,360/14,500)^{(1/2)} - 1 = 2.9\%$

Trend to use: $2.9\% + 2\% = 4.9\%$ annually

Formula: $2016 \text{ Util} = 2014 \text{ Util} * (1+\text{Trend})^2$

$2016 = 15,360 \times (1 + 4.9\%)^2 = 16,902$

Rx:

Trend rate to use: historical 2012 to 2014 annual trend, plus 2%

Historical trend: $(10,520 / 9,530)^{(1/2)} - 1 = 5.1\%$

Trend to use: $5.1\% + 2\% = 7.1\%$ annually

Formula: $2016 \text{ Util} = 2014 \text{ Util} * (1+\text{Trend})^2$

$2016 = 10,520 \times (1 + 7.1\%)^2 = 12,067$

Allowed cost per service

Inpatient:

Trend rate to use: historical 2012 to 2014 annual trend

Historical trend: $(3550 / 3590)^{(1/2)} - 1 = -0.6\%$

Formula: $2016 \text{ Util} = 2014 \text{ Util} * (1+\text{Trend})^2$

$2016 = 3550 \times (1 - 0.6\%)^2 = 3508$

Outpatient:

Trend rate to use: historical 2012 to 2014 annual trend

Historical trend: $(1435 / 1380)^{(1/2)} - 1 = 2.0\%$

Formula: $2016 \text{ Util} = 2014 \text{ Util} * (1+\text{Trend})^2$

$2016 = 1435 \times (1 + 2.0\%)^2 = 1493$

Physician:

Trend rate to use: historical 2012 to 2014 annual trend

Historical trend: $(88 / 85)^{(1/2)} - 1 = 1.7\%$

Formula: $2016 \text{ Util} = 2014 \text{ Util} * (1+\text{Trend})^2$

$2016 = 88 \times (1 + 1.7\%)^2 = 91$

Rx:

Trend rate to use: historical 2012 to 2014 annual trend

Historical trend: $(71 / 69)^{(1/2)} - 1 = 1.4\%$

Formula: $2016 \text{ Util} = 2014 \text{ Util} * (1+\text{Trend})^2$

$2016 = 71 \times (1 + 1.4\%)^2 = 73$

- (b) Calculate the average annual per member claim cost trend between 2014 and 2016. Show your work.

Commentary on Question:

Part b required candidates to determine to overall trend based on total claim costs in 2014 and 2016. Candidates generally did well on part b if they attempted it. A point was deducted for calculating a 2-year trend instead of annualized trend.

11. Continued

$$\text{Formula} = \sum(\text{Cost} * \text{Utilization}) / 1000$$

Average 2014 per member claim cost (from Exhibit 6)

$$(3,550 \times 281 + 1,435 \times 1,325 + 88 \times 15,360 + 71 \times 10,520) / 1,000 = 4,998 \text{ (or can use 5,000 from Exhibit 5)}$$

Avg. 2016 claim cost (from (d))

$$(3,508 \times 281 + 1,493 \times 1,325 + 91 \times 16,902 + 73 \times 12,067) / 1,000 = 5,383$$

$$\text{Trend} = (5,383 / 4,998)^{(1/2)} - 1 = 3.8\%$$

- (c) Calculate the projected average PMPM claims cost of the combined enrollment in 2016 using Exhibit 7 as the source of the Legacy III and SHOP HMO & PPO 2014 claim costs and your trend results from part (b). Show your work.

Commentary on Question:

Part c required candidates to blend Legacy and SHOP PMPMs to get a final manual rate. Very few candidates attempted part c. Those that did tended to blend the PMPMs incorrectly, if at all. Candidates also often missed the benefit adjustment to the Legacy block of business.

1. Legacy III costs:
 - a. 2014 experience: 2014 Incurred Claims/2014 Members
 - i. $13,455,071 / 52,280 = 257.37$ PMPM
 - b. Trend 2 years: $257.37 \times 1.038^2 = 277.30$ PMPM
 - c. Adjust to average SHOP benefit richness: $277.30 \times 1.00 / 0.90 = \mathbf{308.11}$ PMPM
2. SHOP costs:
 - a. 2014 experience: (2014 PPO Incurred Claims + 2014 HMO Incurred Claims)/(2014 PPO Members + 2014 HMO Members)
 - i. $17,527,485 / 74,121 = 236.47$ PMPM
 - b. Trend 2 years: $236.47 \times 1.038^2 = \mathbf{254.78}$ PMPM
3. Combine
 - a. Legacy December 2014 enrollment: $3,830 \times 50\% = 1,915$
 - b. SHOP December 2014 HMO+PPO enrollment: 6,800
 - c. Total: $1,915 + 6,800 = 8,715$
 - d. Legacy vs. SHOP weight: 22%/78%
 - e. Weighted PMPM: $308.11 \times 22\% + 254.78 \times 78\% = \mathbf{266.51}$ PMPM

12. 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:

- (1d) Evaluate the potential financial, legal and moral risks associated with each coverage.

Sources:

Reading Sources: Group Ins, Ch 6; Group Ins, Ch 33

Commentary on Question:

Commentary listed underneath question component.

Solution:

- (a) Explain why insurers prefer to have individuals share in the cost of a group benefits plan.

Commentary on Question:

Most candidates were successful in identifying and explaining the three areas of control present when individuals share in the cost of a group benefits plan. More affordable coverage (i.e. lower premium) was the most frequently overlooked explanation among candidates.

- Control of Utilization
 - Studies show reductions in utilization when there is cost sharing present
 - Brings individual into issue of cost concerns
 - Can reduce utilization to the point it can unfavorably impact health status – thus negating any reduction in costs
 - Control of Costs
 - Lowers premium cost – more affordable coverage
 - Control of Risk to the Insurer
 - Many benefits are not considered and insurable risk, increasing cost sharing results in benefit program that is more representative of insurable risk
- (b) List and describe reasons for recent increases in prescription drug costs in the United States.

12. Continued

Commentary on Question:

Most candidates were successful in identifying and describing many of the reasons for recent increases. Those who were not successful limited their response to only a couple of reasons. At least 8 out of the 10 reasons below were necessary to receive full credit.

- Prescription drug pipeline – recovering R&D costs
 - Biologics – expensive with no generic alternatives
 - Patents – limits generic alternatives
 - Direct to consumer advertising – more consumer awareness
 - Member cost sharing offsets – increases utilization and potentially unnecessary demand
 - Faster approval process – speed to market creates more supply and demand
 - Brand name advertising – steers consumers away from generics
 - Aging population – creates more demand
 - Increase in awareness and test for disease – increases utilization
 - Personalized medicine – leads to increased and potentially unnecessary utilization
- (c) Management is considering replacing the specialty drug co-insurance of 80% with a co-payment of \$500 per script. Calculate the employer coinsurance level for non-specialty drugs that will result in no change to overall expected plan costs. Assume there are no changes in utilization. Show your work.

Commentary on Question:

Most candidates were successful in calculating the correct employer coinsurance level. Common mistakes among candidates who were unsuccessful included calculating the employee, rather than the employer, coinsurance level or forgetting to remove the 80% plan-share coinsurance from the plan paid PMPM before calculating the new non-specialty coinsurance equivalent.

12. Continued

| | Scripts/1000 (a) | Cost/Script (b) | Employee Cost Share/Script (c)=(b)*0.2 | Plan Paid/Script pt (d)=(b)*0.8 | Employee Paid PMPM (e)=((a)*(c))/120 00 | Plan Paid PMPM (f)=((a)*(d))/120 00 | Allowed PMPM (e)+(f) |
|--------------------------------------|---------------------|--------------------|--|---------------------------------------|--|--|----------------------------|
| Generic | 16,000 | \$25.00 | \$5.00 | \$20.00 | \$6.67 | \$26.67 | \$33.33 |
| Preferred Brand | 5,000 | \$75.00 | \$15.00 | \$60.00 | \$6.25 | \$25.00 | \$31.25 |
| Non-Preferred Brand | 2,500 | \$150.00 | \$30.00 | \$120.00 | \$6.25 | \$25.00 | \$31.25 |
| Specialty | 30 | \$12,000.00 | \$2,400.00 | \$9,600.00 | \$6.00 | \$24.00 | \$30.00 |
| Total | | | | | \$25.17 | \$100.67 | \$125.83 |
| | (a) | (b) | (c) | (d)=(b)- (c) | (e)=((a)*(c))/120 00 | (f)=((a)*(d))/120 00 | (e)+(f) |
| Revised Specialty | 30 | \$12,000.00 | \$500.00 | \$11,500.00 | \$1.25 | \$28.75 | \$30.00 |
| Revised Non-Specialty | | | | | (\$25.17-\$1.25)= \$23.92 | (\$100.67-\$28.75)= \$71.92 | \$95.83 |
| Revised Non-Specialty Coinsurance | | | | | (\$23.92/\$95.83) = 24.96% | (\$71.92/\$95.83) = 75.04% | |

13. 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.
- (1d) Evaluate the potential financial, legal and moral risks associated with each coverage.
- (2a) Identify and evaluate sources of data needed pricing, including the quality, appropriateness and limitations of each data source.
- (2e) Identify critical metrics to evaluate actual vs. expected results.

Sources:

Mechanics and Basics of Long-Term Care Rate Increases, Long Term Care News Issue 36

Commentary on Question:

Generally, students only recalled the source material at a superficial level

Solution:

- (a)
 - (i) List key assumptions used to determine if LTC rate increases are required.
 - (ii) Identify challenges in correctly setting these assumptions.

Commentary on Question:

It was not enough to say that long term projections are 'difficult because of their long-term nature'. Students should have described specific challenges like those listed below. Some challenges were applicable to more than one assumption.

13. Continued

Morbidity:

- Product is priced on an issue age, not attained age basis.
- Large discrepancy between average issue age and average claimant age.
- Misses in original morbidity assumptions may not become credibly apparent for many years based on company experience.
- Experience in early years primarily reflects underwriting selection period.

Persistency:

- LTC rates are priced to be in effect over a period of 50 or more years.
- Original pricing assumptions may have been extrapolated from other products.
- Policyholders understand the value of LTC insurance and as a result are lapsing at a much lower rate than originally anticipated.
- Mortality has also improved over the years.

Interest:

- LTC insurance is designed to be pre-funded, so interest is key to ensuring that contract reserves grow enough to support future liabilities.
- Contract reserves held by the company to back its LTC liabilities earn less than originally expected.
- As a result of the economic recession that began in December 2007, many companies' long term investment earnings rates are much lower now than they were at the time of original pricing.
- When premiums come in or assets in the portfolio mature, companies are forced to invest at a lower new money rate.

- (b) State whether you agree or disagree with each of your manager's arguments and justify your responses.

Commentary on Question:

Some arguments were applicable to more than one sub-point.

1) Disagree: LTC products are not annually renewable

- LTC is guaranteed renewable.
- LTC is priced on an issue age basis.
- Misses in persistency and interest have a critical impact on performance, but may not unfold into history for several years.

13. Continued

- 2) Disagree: using historical loss ratios to determine performance is not appropriate
- Low historical loss ratios result from the pre-funding design of LTC.
 - Historically low loss ratios do not mean the company has experienced profit.
 - Unlike medical insurance, evaluating the need for a rate increase based on historical experience is inappropriate because it does not capture the pre-funding component of the product design.
- 3) Disagree: raising rates will not necessarily decrease profits
- The industry has generally seen relatively low shock lapses due to rate increases.
 - Even if the company did experience high shock lapses, lower persistency would mean fewer policyholders would be exposed to the extremely high claim costs that comprise the tail of the claim cost curve.
 - Higher shock lapses will not necessarily decrease profit.
- 4) Agree: rate increases on more recently priced LTC policy forms cannot be pursued until performance has deteriorated to be more than moderately adverse.
- 5) Disagree: the company cannot afford to wait to see if experience worsens
- Frequent analysis and early detection of trends is needed.
 - As more time passes without a rate increase, the future premium base to which a rate increase can be applied continues to shrink.
 - Need to strike a balance between early implementation and the amount of experience needed to determine whether a rate increase is needed.
- 6) Disagree: higher persistency does not mean the company will collect enough premium to pay claims.
- Higher persistency results in significantly higher claims over the lifetime of the product than originally expected.
 - With higher persistency, more policyholders in later years are exposed to the extremely high claim costs that comprise the tail of the claim cost curve.
 - Reserves held by the company will not likely be sufficient to cover increase in future costs, despite additional premium received in the early years.

14. Learning Objectives:

3. Evaluate and recommend an employee benefit strategy.

Learning Outcomes:

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

Sources:

Handbook of Flexible Benefits, Ch 14 and Ch 16.

Commentary on Question:

Commentary listed underneath question component.

Solution:

- (a) Calculate the realistic price tags for 2015. Show your work.

Commentary on Question:

Candidates should be aware of what "realistic" price tags are (i.e. based on expected costs if everyone were in the option). This model solution normalizes the costs to the Core plan. Candidates could also normalize to the Enhanced plan. The majority of candidates did not normalize costs and therefore did not receive full marks.

According to the reading, "realistic" price tags reflect the expected claims of the whole group and are set independently, as if only one option were being offered.

Step 1: Calculate the number of members

Core: $75 + 121 * 2 + 50 * 3 = 467$

Enhanced: $186 + 218 * 2 + 229 * 3 = 1,309$

Step 2: Determine the per-member-per-year costs for 2015:

Core: $\$150,000 / 467 = \321.20

Enhanced: $\$1,000,000 / 1,309 = \763.94

Step 3 Normalize costs to Core option

Enhanced to Core = $\$763.94 / 1.7$ (relative value) = $\$449.38$

Step 4 Determine PMPY cost for Core, if everyone were in Core

PMPY cost = $(\$321.20 * 467 + \$449.38 * 1,309) / 1,776 = \415.67

Step 5 Determine costs for Single/Couple/Family and Core/Enhanced

14. Continued

| | Core | Enhanced (= 1.7 * Core) |
|-----------------------|-------|-------------------------|
| Single | 416 | 707 |
| Couple (= 2 * single) | 831 | 1,413 |
| Family (= 3 * single) | 1,247 | 2,120 |

Step 6 Add in retention (3.5% + 1.5% + \$15) to each:

| | Core | Enhanced |
|--------|-------|----------|
| Single | 451 | 757 |
| Couple | 888 | 1,499 |
| Family | 1,324 | 2,241 |

- (b) Compare the realistic price tags from (a) to the actual price tags, and discuss how the differences have impacted the plan's participation and its costs.

Commentary on Question:

A full response will include the calculation of the costs vs. price tags, for both Core and Enhanced, candidate should realize that the additional costs being incurred by the Enhanced plan are being somewhat offset by lower costs on the Core.

From part a.) It appears that the Core plan is priced properly, but the Enhanced plan is underpriced. The result is evident in the participation, with over 70% of the employees electing the Enhanced plan.

The participation has increased the costs to the plan, as more employees are in a richer plan, and the price tags coming back to the employer are not enough:

Total costs for Enhanced = $\$1,000,000 * (1 + 1.5\% + 3.5\%) + \$15 * 633 = \$1,059,495$

Total price tags received = $\$650 * 186 + \$1,280 * 218 + \$1,900 * 229 = \$835,040$

14. Continued

This is offset by the fact that the members in the Core plan are likely lower claimers than average:

$$\text{Total costs for Core} = \$150,000 * (1 + 1.5\% + 3.5\%) + \$15 * 246 = \$161,190$$

$$\text{Total price tags received} = \$450 * 75 + \$890 * 121 + \$1,320 * 50 = \$207,440$$

- (c) Draft a memo to Company XYZ management recommending a set of 2016 price tags. Justify your position.

Commentary on Question:

A complete response will include trending the price tags by 5%, applying expenses and understanding the company's desire to cap the increase at 10%.

First need to trend forward price tags from part a.) by 5.0%
Compare 2016 realistic price tags to 2015:

| | Core | Enhanced |
|--------|-------|----------|
| Single | +5.2% | +22.2% |
| Couple | +4.7% | +22.9% |
| Family | +5.3% | +23.8% |

Apply company-imposed cap of 10%; only on Enhanced. So final tags are:

| | Core | Enhanced |
|--------|-------|----------|
| Single | 473 | 715 |
| Couple | 932 | 1,408 |
| Family | 1,390 | 2,090 |

While this still underprices the Enhanced plan, it better-represents the cost differential between Core and Enhanced, so participation in the Enhanced plan will be impacted, which should lead to lower overall plan costs.

15. 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:

- (1c) Describe each of the coverages listed above.
- (1d) Evaluate the potential financial, legal and moral risks associated with each coverage.

Sources:

Group Ins, Ch 4

Commentary on Question:

Question was trying to test knowledge of group versus individual life insurance and financial implications of varying the benefit. Full credit was given for detailed descriptions of plan provisions, calculations that included tax impacts, and a thorough recommendation based on employer and employee impact.

Solution:

- (a) List and describe typical group term life insurance plan benefit designs.

Commentary on Question:

Description required to receive full credit

- Flat Dollar Plan – pays \$x,000 per employee
 - Multiple of earnings - pays Y times salary
 - Salary bracket plans – pays X based on salary level; grouped by intervals of salary level: ie, <\$20k has \$10,000 of coverage, \$20-\$40k has \$20,000 of coverage, etc.
 - Position plans – pays salaried employees receive a different benefit than hourly employees, etc.
- (b) List and describe typical features of group term life insurance plans that are intended to protect employees from a lapse in coverage due to disability.

Commentary on Question:

Description required to receive full credit

15. Continued

- Waiver of Premium- waves premium if disability occurs younger than 60 or 65, and remains disabled continuously until death
 - Total and Permanent Disability- provides a monthly benefit less than or equal to death benefit. Provides difference in death benefit upon death
 - Extended Death Benefit- Benefit is payable if coverage ceases before age 60 and insured dies within the year, while being continuously and permanently disabled between coverage end date and death
- (c) Calculate the financial impact of increasing the group life insurance benefit to three times salary on:
- (i) Smithe Inc.
 - (ii) Each individual employee

Show your work.

Commentary on Question:

Many students did not understand the imputed income calculation in terms of an employee impact

Impact to Smithe Inc.:

Paid premium: $Benefit / 1000 * 12 * premium_rate$

Current premium at 1x salary:

$$(250,000 + 150,000 + 90,000 + 75,000) / 1000 * 12 * 0.35 = \$2,373$$

Premium at 3x salary with discount:

$$3 * (250,000 + 150,000 + 90,000 + 75,000) / 1000 * 12 * 0.35 * 0.9 = \$6,407$$

$$\text{So impact to Smithe} = \$6,407 - \$2,373 = \$4,034$$

Impact to individual employees is based on the sum of their individual premium and the tax on imputed income from the employer-provided insurance:

Individual premium: $\frac{2 * Salary}{1,000} * \text{individual premium rate} * 12$

Olga: \$300

Jackie: \$3,600

John: \$540

Steve: \$450

Tax on imputed income formula:

$$\frac{Salary \text{ less } \$50,000}{1,000} * \text{IRS Uniform Monthly Premium Rate per } \$1,000 * 12 * \text{Tax rate}$$

15. Continued

Olga: \$221
Jackie: \$181
John: \$183
Steve: \$95

So current employee expenses =
Olga: \$300 + \$221 = \$521
Jackie: \$3,600 + \$181 = \$3,781
John: \$540 + \$183 = \$723
Steve: \$450 + \$95 = \$545

After the change, individual premiums are assumed to be nil, but the taxes on the imputed income increase:

Tax on imputed income formula: $\frac{3 * \text{Salary less } \$50,000}{1,000} *$

IRS Uniform Monthly Premium Rate per \$1,000 * 12 * Tax rate

Olga: \$773
Jackie: \$722
John: \$1,006
Steve: \$667

Therefore, impact =
Olga: \$733 - \$521 = \$252
Jackie: \$722 - \$3,781 = (\$3,058)
John: \$1,006 - \$723 = \$283
Steve: \$667 - \$545 = \$122

- (d) Draft a memo to Smithe Inc. recommending one of the options under consideration. Justify your response.

Commentary on Question:

Needed to discuss impact (financially) to both employee and employer, as well as employee ability to purchase individual insurance to get full credit

Smithe Inc should consider the health spending account of \$1,000 per employee. While increasing its group life insurance policy to 3x salary is especially helpful to Jackie S., the other three employees – including the lowest-paid employee Steve R. – will be out-of-pocket more money than currently. Furthermore, Smithe Inc will also be out of over \$4,000. The health spending account option is favorable to all employees, carries the same costs (roughly) for Smithe Inc, and would presumably at least help Jackie S with her individual premiums by subsidizing any out-of-pocket medical costs she currently has.

16. Learning Objectives:

3. Evaluate and recommend an employee benefit strategy.

Learning Outcomes:

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

Sources:

[Handbook of EE Benefits, Chapters 1, 24, 32]

Commentary on Question:

This question tested candidates' ability to understand the important factors that must be considered when a small employer attempts to offer a health benefits plan to its employees. In particular, candidates were expected to recognize the difficulties in dealing with a diverse workforce and how vital it is to tailor the communication to an audience that varies in its knowledge of and interest in medical products.

Candidates tended to do well on part (a) and part (b)(ii). These two areas were covered well on study note-cards, so it was often an exercise in recall for the candidates. Part (b)(i) required a deeper understanding of the problem in context of the small employer's limitations. Most candidates stumbled on this part.

Although the rubric was quite rigid, points were given when candidates alluded to certain themes without specifically hitting the main point. For example, in part (a), one of the items to list was "What are the objectives of the employer or employee". If the candidate mentioned the employer/employee's 'goals' or 'strategy' or 'benefits philosophy', points were still awarded.

Solution:

- (a) List the overall questions to be considered in evaluating any existing or newly created employee benefits plan.
 - What are the Employer and Employee Objectives in Establishing the Plan?
 - What Benefits Should Be Provided Under the Plan?
 - Who Should Be Covered Under the Benefit Plan?
 - Should Employees Have Benefit Options?
 - How Should the Benefit Plan Be Financed?
 - How Should the Benefit Plan Be Administered?
 - How Should the Benefit Plan Be Communicated?
- (b) Explain reasons why:
 - (i) Communicating employee benefit programs is challenging to plan sponsors.

16. Continued

- The workforce could be diverse in composition, with various levels of education, financial sophistication, and interest in understanding plan provisions.
 - Some benefits may be of little/no interest to a majority of employees until access is needed. It is difficult to find a medium of communication that would successfully engage such employees.
 - Multiple regulatory requirements often affect plan features and lead to confusion, thus making it difficult for both employees and sponsors to keep up with the changes.
- (ii) Employees of a small company should share in the costs of medical benefits.
- Most employees are accustomed to paying some level of contribution in today's benefit climate.
 - It is much easier to set policy and precedent, and plan for future growth, by introducing contributions at the inception of the plan. Because the company is no longer new, introducing employee contributions now would run the risk of employee anxiety and ill will.
 - Employee contributions can help avoid legal problems (arise from not clear on who is covered)
 - Requiring a contribution motivates employees who have other coverage to decline the employer's plan. The current plan is "free" for all employees, so all will enroll.
 - Employees are more responsible when using benefits that they have paid for. It helps them understand the value of the benefit and promotes a culture of consumerism. It also helps the employer in the form of reduced utilization of services and cost containment.