



Group & Health Design and Pricing Exam – C
(2 hour segment)

Exam GHDPC

Date: Tuesday, November 3, 2020

INSTRUCTIONS TO CANDIDATES

General Instructions

1. This examination has 6 questions numbered 1 through 6 with a total of 40 points.

The points for each question are indicated at the beginning of the question. Questions 2 and 5 pertain to the Case Study.

2. While every attempt is made to avoid defective questions, sometimes they do occur. If you believe a question is defective, the supervisor or proctor cannot give you any guidance beyond the instructions provided in this document.

Written-Answer Instructions

1. Each question part or subpart should be answered either in the Word document or the Excel file as directed. Graders will only look at work in the indicated file.
 - a) In the Word document, answers should be entered in the box marked ANSWER. The box will expand as lines of text are added. There is no need to use special characters or subscripts (though they may be used). For example, β_1 can be typed as beta_1 (and ^ used to indicate a superscript).
 - b) In the Excel document formulas should be entered. Performing calculations on scratch paper or with a calculator and then entering the answer in the cell will not earn full credit. Formatting of cells or rounding is not required for credit.
 - c) Individual exams may provide additional directions that apply throughout the exam or to individual items.
2. The answer should be confined to the question as set.
3. The Word and Excel files that contain your answers must be uploaded before time expires.

Recognized by the Canadian Institute of Actuaries.

CASE STUDY INSTRUCTIONS

The case study will be used as a basis for some examination questions. Be sure to answer the question asked by referring to the case study. For example, when asked for advantages of a particular plan design to a company referenced in the case study, your response should be limited to that company. Other advantages should not be listed, as they are extraneous to the question and will result in no additional credit. Further, if they conflict with the applicable advantages, no credit will be given.

1. (8 points)

- (a) (2 points) List and describe factors that impact Medicare Supplement pricing.

ANSWER:

- (b) (1 point) Describe the different loss ratio standards which must be met as part of a Medicare Supplement annual filing.

ANSWER:

- (c) (1 point) Explain how insurers are prevented from recouping past Medicare Supplement losses.

ANSWER:

You are given the following rating assumptions for Medicare Supplement policies. All policies in this book of business were issued to 80-year-old male non-smokers.

Policy Year	Attained Age	Lapse Rate	Mortality Rate	Survivors	Unadjusted Claim Cost per Life	Sex Adjustment Factor	Smoker/Non-Smoker Adjustment Factor
1	80	18%	0.098	1,000	\$1,600	0.077	-0.03
2	81	15%	0.107	740	\$1,650	0.080	-0.03
3	82	15%	0.118	560	\$1,690	0.082	-0.03

- Discount rate: 5%
- Premiums are paid at the beginning of the policy year
- Claims are paid in the middle of the policy year
- Active life reserves and investment income are excluded from the calculation

- (d) (4 points) Assess whether or not a \$2,400 annual premium satisfies the 65% loss ratio requirement for each of the loss ratio standards. Show your work.

ANSWER:

Question 2 pertains to the Case Study.

2. (6 points)

- (a) (1 point) Describe four factors that influence prescription drug costs and benefit offerings.

ANSWER:

- (b) (1 point) Describe analytical pricing considerations in developing prescription drug plan premiums.

ANSWER:

Quantum is analyzing the drug portion of its Individual and Small Group Grandfathered Plans.

You are given:

- Vaccine fee is \$0
- Sales tax is 0%
- All prescriptions are filled in-network
- Exhibits 1 and 8

- (c) (2 points) Calculate the change in plan liability from 2018 to 2019 for the generic drug tier. Show your work.

ANSWER:

On December 1, 2018 the average wholesale price of the specialty drug tier increased to the 2019 level.

- (d) (2 points) Calculate the price protection rebate required to maintain the same net plan liability for the remainder of 2018. Show your work.

ANSWER:

3. (8 points)

- (a) (1 point) List reasons a holistic and functional approach to employee benefits is needed.

ANSWER:

- (b) (1 point) Identify consequences of transitioning from an employer cost-subsidized model to a fully employee-paid benefits approach.

ANSWER:

- (c) (1 point) List the defining characteristics of a Health Saving Account (HSA) compatible High Deductible Health Plan (HDHP).

ANSWER:

Company ABC offers a single PPO medical plan to its employees. Competing companies offer multiple plans.

- (d) (1 point) Identify the advantages and disadvantages to ABC of offering a single medical plan vs. multiple plan options.

ANSWER:

- (e) (1 point) Describe two sources of financial savings and two concerns that might arise from ABC offering an HSA-compatible HDHP.

ANSWER:

- (f) (2 points) Recommend strategies for ABC to ensure implementation of a new HDHP will be successful. Justify your response.

ANSWER:

3. Continued

ABC decides to offer an HSA-compatible HDHP as the only medical plan.

(g) (*1 point*) Explain the impact on employee behavior and claims utilization:

- (i) After the change is announced
- (ii) During the first plan year following the change
- (iii) During the second plan year following the change

ANSWER:

4. (5 points) Your company is reviewing its dental insurance business.

(a) (1 point) List and describe three drivers of product ideas.

ANSWER:

(b) (2 points) Compare and contrast the following dental provider reimbursement methods:

(i) Fee-for-service (FFS)

(ii) Preferred Provider Organization (PPO)

(iii) Capitation

ANSWER:

You are given the following for a block of dental insurance:

- No annual maximum in 2019
- 2020 claims trend: 5%
- 2019 claims cost distribution:

Percent of Members	Claims Cost
30%	\$0
25%	\$20
20%	\$70
15%	\$250
9%	\$800
1%	\$2,000

(c) (2 points) Calculate the dampening effect on trend of a \$1,500 annual maximum. Show your work.

ANSWER:

Question 5 pertains to the Case Study.

- 5.** (6 points) Your Eyes and Smiles Insurance Company (Your Eyes) plans to expand its presence in the individual dental market in 2020. As a result, Your Eyes is revising its product suite to better suit the individual market.

You are given:

- Exhibit 5 provides projected allowed claims for a plan with no deductible or maximum
- 2020 claims trend: 5%

- (a) (3 points) Calculate the value of the following deductibles in 2020:

(i) \$50

(ii) \$100

Show your work.

ANSWER:

5. Continued

Your Eyes is reviewing its provider contracts and benefit structures.

You are given:

- No deductible
- No benefit maximum
- Exhibits 3 and 6
- The Tight Network Provider Discount increases to 40%
- The following benefit structure:

Class I Coinsurance	Class II Coinsurance	Class III Coinsurance
0%	20%	50%

- (b) (*2 points*) Calculate the 2020 net benefit cost. Show your work.

ANSWER:

- (c) (*1 point*) Recommend cost mitigation strategies to limit antiselection risk for dental insurance. Justify your response.

ANSWER:

6. (7 points)

- (a) (1 point) Describe strategies for designing a total benefits package offered to each of:

(i) Highly skilled employees in a tight labor market

(ii) Less skilled employees with a high turnover rate

ANSWER:

Company XYZ is a small, rapidly growing company with 55 highly skilled employees. XYZ offers a high deductible health plan (HDHP) with options to purchase dental and vision benefits. XYZ does not contribute to premiums for its employees.

- (b) (2 points) Describe adverse selection considerations for the current benefits package.

ANSWER:

The annual premium for XYZ's HDHP is \$8,700 for a single employee and \$13,500 for family coverage. Each of XYZ's employees is paid \$70,000 annually.

- (c) (1 point) Calculate the minimum annual employer payroll contribution for a single employee such that XYZ's coverage will be considered affordable under the Affordable Care Act. State your assumptions. Show your work.

ANSWER:

- (d) (1 point) Describe the purpose of cost sharing in group medical insurance.

ANSWER:

6. Continued

- (e) (*1 point*) Compare defined benefit and defined contribution employee benefit strategies.

ANSWER:

- (f) (*1 point*) Recommend a payroll contribution strategy for XYZ. Justify your response.

ANSWER:

****END OF EXAMINATION****