

Exam GHDPA

Date: Tuesday, November 2, 2021

INSTRUCTIONS TO CANDIDATES

General Instructions

1. This examination has 8 questions numbered 1 through 8 with a total of 60 points.

The points for each question are indicated at the beginning of the question. Question 4 pertains 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, as long as your work and assumptions are clear to an individual with average Excel experience reviewing the submitted file.
 - 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. Prior to uploading your Word and Excel files, each file should be saved and renamed with your five-digit candidate number in the filename.
4. The Word and Excel files that contain your answers must be uploaded before the five-minute upload period expires.

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Navigation Instructions

Open the Navigation Pane to jump to questions.

Press Ctrl+F, or click View > Navigation Pane:



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) (1 point) List the steps for completing an expense review.

ANSWER:

- (b) (2 points)

- (i) Describe the categories of expenses to consider in expense studies.

ANSWER:

- (ii) Describe unit measurements that can be used for each expense category.

ANSWER:

- (c) (1 point) Describe considerations when allocating expenses for underwriting activities.

ANSWER:

- (d) (2 points) Compare and contrast considerations for applying expenses when setting premium rates for:

- Individual disability insurance
- Group health insurance

ANSWER:

1. Continued

You are reviewing the premium rates for PQR Insurance. You are given the following loss ratios and retention assumptions as a percent of premium:

- Target loss ratio 70%
- Actual loss ratio 75%

	Current	Proposed
Administration	10.0%	11.0%
Claim adjudication	3.0%	2.8%
Commissions	10.0%	10.0%
Premium Taxes	2.0%	2.0%
Risk and Profit	5.0%	5.0%

- (e) (2 points) Calculate the required adjustment to premium. Show your work. State your assumptions.

The response for this part is to be provided in the Excel spreadsheet.

2.

(6 points) You are evaluating primary care physician (PCP) contract proposals for DEF Insurance.

(a) (2 points) Describe the importance, in the context of an Alternative Payment Plan (APP), of:

(i) Capitation payments.

ANSWER:

(ii) Shadow fee-for-service billing.

ANSWER:

(iii) New patient incentives.

ANSWER:

(iv) Block funding.

ANSWER:

Contract negotiations between DEF and PCP Group 1 stalled because Group 1 is reluctant to assume the risks embedded in capitation arrangements or the APP. Group 1 does not currently manage patient utilization.

(b) (1 point) Propose two payment arrangements for Group 1 that minimize DEF's utilization risk and may be acceptable to Group 1. Justify your response.

ANSWER:

2. Continued

Group 1 and DEF agree to a Pay for Performance (P4P) agreement for knee replacements. You are given:

- DEF pays for 1,000 knee replacements performed by Group 1 each year
- The target bonus for Group 1 is 2% of total knee replacement costs
- Group 1 receives the performance bonus for knee replacements if all of the following conditions are satisfied:
 - 1) Total episode costs decrease at least 2% between Year 0 and Year 1
 - 2) Total episode costs are at least 5% below the national average in Year 1
 - 3) The complication rate is below 7% in Year 1

Group 1's Total Knee Replacement Episode Costs							
Year 0				Year 1			
Place of Discharge	% Total Episodes	Cost	Complication Rate	Place of Discharge	% Total Episodes	Cost	Complication Rate
Home	10%	\$23,000	15%	Home	15%	\$24,000	15%
Rehab	48%	\$35,000	8%	Rehab	47%	\$34,500	6%
Facility	42%	\$40,000	5%	Facility	38%	\$40,000	4%

National Total Knee Replacement Episode Costs			
Year 1			
Place of Discharge	% Total Episodes	Cost	Complication Rate
Home	56%	\$22,755	20%
Rehab	32%	\$32,931	7%
Facility	12%	\$40,226	3%

- (c) (3 points) Evaluate the value, if any, of the Year 1 bonus payment due to Group 1. Show your work.

The response for this part is to be provided in the Excel spreadsheet.

3.

(6 points)

(a) (1 point) Describe the following types of antiselection:

(i) External

ANSWER:

(ii) Internal

ANSWER:

(iii) Durational

ANSWER:

(b) (2 points) List and describe measures included in the Affordable Care Act (ACA) to control antiselection.

ANSWER:

3. Continued

Your company currently offers Plan A and will be introducing Plan B. Members will be able to choose either plan.

You are given the following for Plan A:

Annual Deductible	\$250
Premium PMPM	\$75
Enrollment	80% healthy members; 20% unhealthy members
Claims Cost PMPM	\$100 per healthy member; \$200 per unhealthy member
Expected Premium Increase	20%

You are given the following for Plan B:

- Plan B has a \$500 annual deductible, which produces expected savings for an average member equal to 5% of premium
 - All healthy members move to Plan B
 - All unhealthy members remain in Plan A
- (c) (2 points) Calculate the premium leakage. Show your work. State your assumptions.

The response for this part is to be provided in the Excel spreadsheet.

- (d) (1 point) Develop a plan to reduce premium leakage. Justify your response.

ANSWER:

Question 4 pertains to the Case Study.

4.

(7 points)

- (a) (1 point) Identify characteristics that impact a health plan's network access requirements.

ANSWER:

- (b) (2 points) Describe considerations of the typical contract negotiation process.

ANSWER:

Royale Health asks you to evaluate a proposed contract with Paloma Memorial Hospital (Paloma).

You are given:

- Paloma is recognized for the high-quality of its neonatal intensive care unit (NICU) and maternity services
- The contract with Paloma will have the same terms as the contract with Lynd provided in Royale Health Email 1
- Royale Health attributes 3,000 members to Lynd and 1,000 members to Paloma
- No utilization trend or mix changes between 2019 and 2020
- The following utilization metrics for 2019:

Service	Average Length of Stay (ALOS) – Lynd	Admissions – Lynd	ALOS – Paloma	Admissions – Paloma
NICU – Level I	10.2	360	9.3	80
NICU – Level II	7.0	240	6.4	70
NICU – Level III	5.0	180	6.3	50
NICU – Level IV	5.0	180	6.9	30
Maternity – Normal Delivery	2.1	600	2.7	220
Maternity – C Section	3.5	450	5.5	160

4. Continued

(c) (3 points) Calculate the reimbursement Royale Health would owe for services provided in 2020 by:

(i) Lynd.

(ii) Paloma.

Show your work.

The response for this part is to be provided in the Excel spreadsheet.

(d) (1 point) Recommend modifications Royale Health should propose to the contract with Paloma. Justify your response.

ANSWER:

5.

(9 points)

- (a) (2 points) Describe dynamics that make it difficult to apply credibility when pricing group long term disability (LTD) insurance.

ANSWER:

You are reviewing the credibility applied to group LTD insurance by two insurers: ABC and XYZ. The credibility formulas used when quoting a group with n lives are:

n	ABC	XYZ
0 – 249	0	$(n/500)^{(2)}$
250 – 500	$(n/500)^{(0.5)}$	$(n/500)^{(2)}$
501+	1	1

- (b) (1 point) Create a table comparing the credibility level for ABC and XYZ for groups with 50, 100, 300, and 500 lives.

The response for this part is to be provided in the Excel spreadsheet.

- (c) (2 points) Explain reasons why ABC and XYZ may have developed different credibility curves.

The response for this part is to be provided in the Excel spreadsheet.

5. Continued

You are given the following information on group LTD policies for seven groups:

Policy	Manual Claims	Prior Experience Claims	Blended Expected Claims	Group Size	Actual Claims
1	3,518	4,561	3,622	221	2,048
2	5,123	4,955	5,073	435	5,544
3	3,055	2,018	2,537	1,088	3,183
4	2,354	2,498	2,455	1,539	2,789
5	4,005	4,210	4,210	1,857	4,699
6	3,579	3,365	3,365	2,158	3,487
7	2,154	2,235	2,195	1,158	2,005

(d) (2 points) Describe reasons actual claims may deviate from:

(i) The insurer's manual rates.

ANSWER:

(ii) The group's prior experience claims.

ANSWER:

(e) (2 points) Recommend adjustments to the credibility formulas used by ABC and XYZ. Justify your response.

ANSWER:

6.

(11 points)

- (a) (1 point) List ways provider group-based accountable care organizations (ACOs) generate savings.

ANSWER:

- (b) (2 points) Compare and contrast ACOs and health maintenance organizations (HMOs).

ANSWER:

- (c) (2 points) Compare and contrast ACOs and typical disease management (DM) programs.

ANSWER:

- (d) (2 points) Explain in the context of physician cost profiling:

- (i) Validity.

ANSWER:

- (ii) Reliability.

ANSWER:

6. Continued

You are given:

Physician	Episode Count ('000s)	Total Cost ('000s)	Reliability Score	Cost Classification
A	4.1	\$4,510	0.44	Low Cost
B	1.6	\$80	0.70	Not Low Cost
C	1.5	\$3,150	0.80	Low Cost
D	0.6	\$660	0.02	Not Low Cost
E	2.9	\$29,000	0.32	Not Low Cost
F	2.1	\$105	0.89	Low Cost
G	2.1	\$4,410	0.50	Not Low Cost
H	1.4	\$2,940	0.26	Not Low Cost
I	2.0	\$4,200	0.30	Not Low Cost
J	1.7	\$1,870	0.16	Not Low Cost
K	3.2	\$3,520	0.80	Not Low Cost
L	3.3	\$6,930	0.48	Not Low Cost
M	4.1	\$4,510	0.06	Low Cost
N	1.9	\$5,890	0.76	Not Low Cost
O	4.4	\$44,000	0.12	Not Low Cost
P	1.8	\$1,980	0.89	Low Cost
Q	0.8	\$2,480	0.30	Not Low Cost
R	2.5	\$5,250	0.79	Not Low Cost
S	4.3	\$9,030	0.10	Not Low Cost
T	3.0	\$6,300	0.97	Not Low Cost
U	0.8	\$1,680	0.28	Not Low Cost
V	4.4	\$13,640	0.52	Not Low Cost
W	1.3	\$4,030	0.38	Not Low Cost
X	1.7	\$5,270	0.45	Not Low Cost
Y	2.3	\$23,000	0.02	Not Low Cost
Z	0.3	\$330	0.70	Low Cost

6. Continued

(e) (4 points)

- (i) Critique the physician cost classifications.
- (ii) Recommend changes to the cost classifications.

Show your work. Justify your response.

The response for this part is to be provided in the Excel spreadsheet.

7.

(7 points)

- (a) (1 point) Describe how claims experience is evaluated for the following insurance products:

- (i) Group Life

ANSWER:

- (ii) Disability Income

ANSWER:

- (iii) Medical

ANSWER:

Company DEF offers a single medical plan in 2020 but will offer employees a choice between three plans in 2021. You are given:

	Current	Proposed		
		HMO	PPO	POS
2020 Claims per Employee	\$10,000	n/a	n/a	n/a
Relative Benefit Level	1.00	0.80	0.95	1.05
Provider Discount	1.00	0.85	0.95	1.10
Utilization Savings	1.00	0.80	0.90	1.15
Annual Trend	1.15	1.10	1.12	1.15
Projected Enrollment Mix	N/A	25%	50%	25%
Selection Factor	1.00	0.80	0.95	1.20

- (b) (2 points) Calculate the expected 2021 medical claims cost per employee for DEF. Show your work.

The response for this part is to be provided in the Excel spreadsheet.

7. Continued

At the start of 2021, DEF downsized. You are given the following enrollment distribution:

	HMO	PPO	POS
Actual Enrollment Mix	20%	40%	40%

- (c) (1 point) Calculate the revised medical claims cost per employee for DEF based on the actual enrollment. Show your work.

The response for this part is to be provided in the Excel spreadsheet.

- (d) (1 point) Describe elements of a well-designed risk-sharing agreement.

ANSWER:

- (e) (1 point) Propose a risk-sharing agreement for 2021.

ANSWER:

- (f) (1 point) Calculate the risk-sharing agreement results for 2021 based on your proposal in part (e). Show your work. State your assumptions.

The response for this part is to be provided in the Excel spreadsheet.

8.

(6 points)

- (a) (1 point) List and describe the categories of quality measures established by Green Shield Canada in its Value Based Pharmacy Initiative.

ANSWER:

- (b) (1 point) Describe advantages and disadvantages of level funded arrangements for employer groups.

ANSWER:

Company LMN has a level funded health insurance policy. You are given LMN's 2020 claim experience for the five employees using Drug A:

Dispense Date	Scripts	Dispense Date	Scripts
1/1/2020	10	7/1/2020	10
2/1/2020	5	8/1/2020	5
3/1/2020	10	9/1/2020	10
4/1/2020	5	10/1/2020	5
5/1/2020	10	11/1/2020	10
6/1/2020	5	12/1/2020	5

LMN asks you to evaluate an alternative reimbursement arrangement for Drug A in 2022. You are given:

- Members take the drug every month in the same pattern as 2020
 - No employees start or stop taking the drug
 - LMN paid \$3,000 per employee taking the drug in 2020
 - Reimbursement under the current arrangement increases 5% per year
 - The alternative reimbursement is \$46.80 per script for the first half of 2022, with a 4% increase every six months
- (c) (2 points) Calculate the change in reimbursement for Drug A in 2022 under the alternative reimbursement arrangement. Show your work.

The response for this part is to be provided in the Excel spreadsheet.

8. Continued

(d) (2 points) Assess how the change in reimbursement for Drug A will impact LMN's:

(i) Paid claims fund.

ANSWER:

(ii) Specific stop loss.

ANSWER:

(iii) ASO fee.

ANSWER:

****END OF EXAMINATION****