

CURATED PAST EXAM ITEMS - Questions -

GH 101 – Benefits and Pricing

Important Information:

- These curated past exam items are intended to allow candidates to focus on past SOA fellowship assessments. These items are organized by topic and learning objective with relevant learning outcomes, source materials, and candidate commentary identified. We have included items that are relevant in the new course structure, and where feasible we have made updates to questions to make them relevant.
- Where an item applies to multiple learning objectives, it has been placed under each applicable learning objective.
- Candidate solutions other than those presented in this material, if appropriate for the context, could receive full marks. For interpretation items, solutions presented in these documents are not necessarily the only valid solutions.
- Learning Outcome Statements and supporting syllabus materials may have changed since each exam was administered. New assessment items are developed from the current Learning Outcome Statements and syllabus materials. The inclusion in these curated past exam questions of material that is no longer current does not bring such material into scope for current assessments.
- Thus, while we have made our best effort and conducted multiple reviews, alignment with the current system or choice of classification may not be perfect. Candidates with questions or ideas for improvement may reach out to <u>education@soa.org</u>. We expect to make updates annually.

GH 101 – Benefits and Pricing

COURSE GH 101 Curated Past Exam Questions

Learning Objective 1: Plan and Product Provisions

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1. Fall 2020 DP-C #4

Skwire 3 – Product Development Skwire 6 – Dental Benefits (US) Skwire 22 – Dental Claim Costs

(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	Claims
Members	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:

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Learning Objective 1: Plan and Product Provisions

2. Fall 2021 DP-C #1

Skwire 5 – Medical Benefits (US)

(6 points)

- (a) (2 points)
 - (i) Describe the three dimensions of medical benefit plans.
 - (ii) List two examples for each dimension.

ANSWER:

- (b) (2 points) Explain how the three dimensions of medical benefit plans interact within:
 - (i) Managed Indemnity

ANSWER:

(ii) Health Maintenance Organization (HMO)

ANSWER:

(iii) Preferred Provider Organization (PPO)

ANSWER:

(c) (1 point) Explain the purpose of required cost sharing between the plan and the insured.

ANSWER:

(d) (*1 point*) Propose strategies an insurance company can use to manage insured spend at non-preferred providers.

3. Spring 2023 DP #1a-b

Skwire 3 – Product Development Skwire 6 – Dental Benefits (US)

(2 *points*) You are an actuary for PQR Insurance, which offers individual ACA and Medicare Advantage (MA) products.

(a) (*1 point*) Describe advantages and disadvantages to PQR of introducing an innovative product design.

ANSWER:

PQR has aggressive individual ACA membership growth targets. The product team proposes offering dental coverage embedded within a bronze plan targeted at families to help achieve these targets.

(b) (*1 point*) Critique this proposal.

Spring 2023 DP #4a Skwire 7 – Pharmacy Benefits (US) 4.

(2 points)

(2 points) List and describe the entities in the prescription drug benefits system (a) framework.

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Learning Objective 2: Manual Rates

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1. Fall 2020 DP-C #2

Skwire 7 – Pharmacy Benefits (US) Skwire 23 – Pharmacy Claim Costs

Question pertains to the Case Study.

(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 2 below

Exhibit 1 - Benefit Summary (Grandfathered Plans)							
(Quantum Legacy III Individual and Small Group						
Benefit Category* 2017 2018 2019							
Deductible	\$500 IN/ \$1,000 OON	\$1,000 IN/ \$2,000 OON	\$1,500 IN/ \$3,000 OON				
General Coinsurance	10% IN/ 30% OON	20% IN/ 40% OON	20% IN/ 40% OON				
Maximum Out-of-Pocket	\$2,200 IN/ \$4,400 OON	\$3,000 IN/ \$6,000 OON	\$3,500 IN/ \$7,000 OON				
PCP	\$25 IN/ Ded + Coins OON	\$30 IN/ Ded + Coins OON	\$30 IN/ Ded + Coins OON				
Specialist	\$50 IN/ Ded + Coins OON	\$60 IN/ Ded + Coins OON	\$60 IN/ Ded + Coins OON				
Prescription Drugs (Generic/Preferred Brand/Non- Preferred Brand/Specialty)	\$5/\$40/\$60/\$100 IN/ All Tiers 30% Coins OON	\$10/\$50/\$75/\$150 IN/ All Tiers 40% Coins OON	\$10/\$50/\$75/20% IN/ All Tiers 40% Coins OON				

*All other benefits are subject to Deductible and Coinsurance

**IN = In-Network Benefits, OON = Out-of-Network Benefits

Exhibit 2 - Rx Information					
		2017	2018	2019	
	Generic	\$45	\$50	\$55	
Average	Preferred Brand	\$200	\$190	\$205	
Wholesale Price	Non-Preferred Brand	\$235	\$245	\$250	
	Specialty	\$2,585	\$2,675	\$2,700	
	Generic	70%	75%	75%	
Discounts	Preferred Brand	15%	20%	25%	
Discounts	Non-Preferred Brand	10%	12%	15%	
	Specialty	8%	8%	10%	
	Generic	\$1.50	\$1.50	\$2.00	
Diananaina Easa	Preferred Brand	\$1.50	\$1.50	\$2.00	
Dispensing Fees	Non-Preferred Brand	\$1.50	\$1.50	\$2.00	
	Specialty	\$1.50	\$1.50	\$2.00	

(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.

2. Fall 2020 DP-C #5

Skwire 21 – Medical Claim Costs Skwire 22 – Dental Claim Costs Skwire 6 – Dental Benefits (US)

(6 points) Your Eyes and Smiles Insurance Company (Your Eyes), a leading provider of dental and vision benefits, offers managed care and indemnity programs. 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:

- 2020 claims trend: 5%
- An expected claims cost table, providing projected allowed claims for a plan with no deductible or maximum

2019 Expected Claims				
Range of Percent		2019 Expected Claim		
Claims	Insureds	Cost		
\$0	15.0%	\$0.00		
\$0.01-\$50	25.0%	\$19.05		
\$50.01 - \$150	30.0%	\$66.67		
\$150.01-\$500	20.0%	\$238.10		
\$500.01-\$1500	9.5%	\$761.90		
>\$ 1,500.01	0.5%	\$1904.76		

- (a) (*3 points*) Calculate the value of the following deductibles in 2020:
 - (i) \$50
 - (ii) \$100

Show your work.

Provider Discount					
Network Discount Penetration					
Tight	35%	40%			
Broad	20%	65%			
90 th Percentile	5%	N/A			

Current provider discounts, expected cost, and utilization are provided in the following exhibits

Tight Network Services				
Tight Network:Class2019 Annual Servicesper 1,000 Members		Tight Network: 2019 Avg Cost per Service		
Class I	4,500	\$75		
Class II	1,500	\$238		
Class III	500	\$2,500		

Your Eyes is reviewing its provider contracts and benefit structures.

You are given:

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

Class I	Class II	Class III	
Coinsurance	Coinsurance	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.

3. Spring 2021 DP-C #1

Skwire 7 – Pharmacy Benefits (US) Skwire 23 – Pharmacy Claim Costs

(9 points)

(a) (*1 point*) Describe the duties of a pharmacy benefit manager.

ANSWER:

(b) (*1 point*) List and describe the components of a pharmacy allowed amount.

ANSWER:

(c) (*l point*) Describe formulary management programs that can impact a plan's expected cost and utilization.

ANSWER:

ABC Insurance provides the following 2020 claims experience and projected 2022 discounts. You are given:

- 0% AWP trend
- 0% utilization trend

Drug	Average Wholesale Price	Dispensing Fee	2020 Discount	2022 Discount	Tier	Scripts per 1,000 members
А	\$50	\$2.00	80%	80%	1	6,000
В	\$60	\$2.00	85%	90%	1	7,200
С	\$250	\$2.00	60%	65%	2	2,400
D	\$300	\$2.00	60%	65%	3	1,800
Е	\$400	\$2.00	40%	35%	3	3,600
F	\$10,000	\$2.00	25%	25%	4	36

Tier	Tier Description	Copay
1	Generics	\$5
2	Preferred Brands	\$25
	Non-Preferred	
3	Brands	\$50
4	Specialty	30%

Course GH 101 – Benefits and Pricing

Learning Objective 2: Manual Rates

(d) (*3 points*) Calculate the change in ABC's allowed cost PMPM from 2020 to 2022. Show your work.

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

ABC is revising its formulary for 2022 to lower its costs. You are given:

- No change in utilization from 2020 to 2022.
- No rebates in 2020.
- Rebates per script for 2022:

Drug	2022 Tier	Rebate per Script
А	1	\$0
В	1	\$0
С	2	\$25
D	2	\$25
Е	2	\$25
F	4	\$0

(e) (2 *points*) Calculate the change in the 2022 net plan cost PMPM due to the formulary revisions. Show your work.

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

(f) (*1 point*) Recommend actions ABC can take to further reduce its costs. Justify your response.

4. Spring 2021 DP-C #2

Skwire 29 – Group UW Skwire 20 – Pricing Group Insurance

(6 points) Royale Health offers coverage options for large group employers, including fully insured options and administrative services only (ASO) options. Health coverage plan options offered by Royale Health include medical and prescription plans, which are marketed primarily through agents and brokers.

(a) (*1 point*) Describe characteristics of successful health plan underwriting and rating.

ANSWER:

Royale Health requested that you review a large group product quote one of its analysts developed for Company XYZ. You are given:

- XYZ has 500 enrolled employees
- Policy period will be July 1, 2021 to December 31, 2022
- Current Preferred Provider Organization (PPO) rates are:
 - Employee only coverage: \$300 PMPM
 - Employee and family coverage: \$800 PMPM

Manual Claim Costs PMPM (Q1 2020)				
Plan	Plan Product Type Mar			
PPO500	PPO	\$399.50		
PPO1000	PPO	\$370.15		
PPO2000	PPO	\$320.20		
HDHP2500	HDHP	\$260.25		
HDHP3000	HDHP	\$238.50		
HDHP3500	HDHP	\$215.20		

The analyst's rate calculation:

Manual Rate:	\$399.50
Industry Factor	1.2
Age Factor	0.9
Sex Factor	1.1
Final Rate	\$474.606

- (b) (*2 points*)
 - (i) Critique the rate calculation.

ANSWER:

(ii) Propose adjustments to the calculation. Justify your response.

ANSWER:

Royale Health informs you claims data is available from XYZ's current insurer.

(c) (2 points) Create a data request. Justify each element included in the request.

ANSWER:

(d) (*1 point*) Propose adjustments to the rate calculation to incorporate XYZ's claims experience. Justify your response.

5. Fall 2021 DP-C #2

Skwire 35 – Medical Claim Cost Trend

(9 points) You are a large group pricing actuary at RST Health Insurance.

- (a) (*1 point*) Describe the following components of core cost trend and provide an example for each.
 - (i) Unit cost trend

ANSWER:

(ii) Severity

ANSWER:

(iii) Mix of services

ANSWER:

You are given:

		2020 (Actual)		2021 (Pr	ojected)
Medical Category	Medical Subcategory	Utilization per 1,000	Cost Per Service	Utilization per 1,000	Cost Per Service
Hospital Services	Inpatient - Medical	100	4,000	110	4,100
Hospital Services	Inpatient - Surgical	80	9,000	85	9,100
Hospital Services	Inpatient - Maternity	25	3,500	35	3,600
Hospital Services	Inpatient - Mental Health	20	1,000	25	1,050
Hospital Services	Inpatient - Other	20	600	25	620
Hospital Services	Outpatient - ER	150	1,200	155	1,220
Hospital Services	Outpatient - Radiology	300	600	195	610
Hospital Services	Outpatient - Pathology	350	200	355	220
Hospital Services	Outpatient - Surgery	120	3,400	125	3,450
Hospital Services	Outpatient - Other	500	250	520	260
Physician Services	Office Visit - 15 minutes	5,300	60	5,350	70
Physician Services	Office Visit - 30 minutes	2,800	80	2,805	85
Physician Services	Other	170	300	175	320
Ancillary Services	Ambulance	15	1,400	20	1,410
Ancillary Services	Rx	7,000	75	7,005	80
Ancillary Services	Physical Therapy	700	115	705	120
Ancillary Services	Other	120	200	125	200

(b) (2 points) Calculate the components of core cost trend for 2021. Show your work.

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

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Learning Objective 2: Manual Rates

You are given:

Day Counts					
2020 2021 Weight					
Weekdays	252	251	1.00		
Weekends and Holidays	114	114	0.45		

Trend Component	2021 Impact
Benefit Changes	0.5%
Capitation Impact	0.1%
Clinical Program Changes	-0.2%
Demographic Changes	0.3%
Geographic Changes	0.5%
Leveraging	0.5%
Network Changes	0.3%
One-Time Pandemic Adjustment	2.0%

(c) (*3 points*) Calculate the components of the final trend projection and complete the table below. Show your work.

Trend Component	Projected 2021 Trend
Core Cost Trends	
Core Utilization Trends	
One-Time Changes	
Population Shifts	
Structural Changes	
Alternative Payment Models	
Allowed Trend	
Leveraging	
Net Paid Trend	

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

In February 2022, RST's Chief Actuary asks you to validate the prior pricing trend estimates. You are given the following revised 2021 trend estimates:

Trend Component	Revised 2021 Estimate
Core cost trends	3.40%
Core utilization trends	3.00%
One-time changes	3.00%
Structural changes	0.50%
Population shifts	0.50%
Capitation trend impact	0.20%
Leveraging	0.6%

(d) (2 points)

- (i) Calculate the revised 2021 trend. Show your work.
- (ii) Explain differences between the projected and current estimates.

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

(e) (*1 point*) Recommend modifications to improve the trend projection process. Justify your response.

6. Spring 2022 DP #6

Skwire 21 – Medical Claim Costs

(9 points)

(a) (*1 point*) Describe the allowable rating factors for small groups under the Affordable Care Act (ACA).

ANSWER:			

You are the pricing actuary for an insurer that operates in States A, B, and C. You are pricing the 2022 small group line of business in State A.

You are given for State A:

- The regulator requires the use of claim cost factors based on 2019 allowed PMPM due to claim suppression in 2020.
- The following 2019 and 2020 claims experience:

Gender	Age Band	Area	2019 Member Months	2019 Allowed Claims	2020 Member Months	2020 Allowed Claims	2022 Projected Member Months
Child	0-9	1	480	\$154,513	400	\$148,179	320
Child	10-19	1	480	69,077	600	93,464	400
Male	20-39	1	960	178,145	1,000	186,065	800
Male	40+	1	960	727,121	800	566,135	720
Female	20-39	1	960	399,917	1,100	511,679	800
Female	40+	1	960	563,519	1,100	625,359	960
Child	0-9	2	800	223,544	880	285,783	880
Child	10-19	2	800	99,937	1,320	174,733	1,100
Male	20-39	2	1,600	257,733	2,200	359,371	2,200
Male	40+	2	1,600	1,051,969	1,760	1,160,270	1,980
Female	20-39	2	1,600	578,583	2,420	997,107	2,200
Female	40+	2	1,600	815,276	2,420	1,264,513	2,640
Child	0-9	3	320	118,338	320	138,880	400
Child	10-19	3	320	52,904	480	89,515	500
Male	20-39	3	640	136,436	800	171,003	1,000
Male	40+	3	640	556,883	640	520,305	900
Female	20-39	3	640	306,285	880	460,660	1,000
Female	40+	3	640	431,584	880	567,973	1,200

Course GH 101 – Benefits and Pricing

Learning Objective 2: Manual Rates

- (b) (2 points) Calculate the:
 - (i) Claim cost factors for rating areas 1, 2, and 3 using 2019 experience.
 - (ii) Composite geographic area factors for 2019, 2020, and 2022 projection.

Show your work.

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

State A 2019 and 2020 experience is not fully credible. You are given the 2019 manual experience from State B and State C combined:

Gender	Age Band	Member Months	Allowed Claims
Child	0-9	17,600	\$6,088,319
Child	10-19	22,000	\$3,402,296
Male	20-39	55,000	\$10,967,927
Male	40+	35,200	\$28,650,911
Female	20-39	55,000	\$24,621,876
Female	40+	35,200	\$22,204,456

- (c) (2 points) Calculate the:
 - (i) Claim cost factors for each age and gender combination from the combined States B and C data.
 - (ii) Composite age and gender factors for:
 - 2019 claims experience
 - 2020 claims experience
 - Manual experience from States B and C
 - 2022 projection

Show your work.

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

You are given:

- The composite area factor underlying the manual rate is 0.963
- Provider discounts in States B and C are 4.5% lower than in State A
- 5% annual trend

Distribution	Composite Induced Utilization Factor	Credibility Weighting
2019	1.069	20%
2020	1.067	20%
Manual	1.079	60%
2022	1.062	n/a

(d) (*3 points*) Calculate the credibility blended allowed PMPM claim cost for 2022 using the 2019 and 2020 experience and manual rates. Show your work.

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

An actuarial student is reviewing the rate development and is concerned:

- (i) The claim cost factors by age are not the same as the allowable rating factors.
- (ii) The claim cost factor varies by gender.
- (e) (*1 point*) Assess each statement. Justify your response.

7. Spring 2022 DP #7

Skwire 6 – Dental Benefits (US) Skwire 22 – Dental Claim Costs

(7 points)

(a) (2 points) Compare and contrast types of dental plans by completing the table below.

Plan Type	Relative Premium	Patient Access	Quality Assurance	Cost Management
Indemnity				
НМО				
РРО				

(b) (*1 point*) Describe financial risks and benefits employers address by offering group dental insurance.

ANSWER:			

You are given the following for a group dental policy:

- Deductible for in-network and out-of-network services: \$0
- Profit target: 5% of gross premiums
- Expense target: 20% of net premiums
- Premium taxes: 2% of gross premiums
- Annual policy fee: \$10 per member
- Membership: 1,500
- Dental policy assumptions and benefits:

Class	Utilization per 1,000	Allowed Cost per Service	In Network Discount	In Network Penetration	Payer In Network Coinsurance	Payer Out of Network Coinsurance
Class I: Preventive	2,200	\$50	15%	80%	100%	100%
Class II: Basic	900	\$250	30%	60%	80%	60%
Class III: Major	200	\$600	30%	60%	50%	40%

- (c) (*3 points*) Calculate:
 - (i) The expected per member per month (PMPM) claim costs.
 - (ii) The gross monthly premium.

Show your work.

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

(d) (*1 point*) Describe methods an insurer can use to lower expected dental claim costs without changing the cost sharing provisions.

8. Spring 2022 DP #9

Skwire 5 – Medical Benefits (US) Skwire 21 – Medical Claim Costs

(9 points)

(a) (1 point) Describe the purpose of cost sharing in a medical benefit plan.

ANSWER:

ABC Consulting provides a self-insured health plan for 500 employees. You are given the following 2021 PPO benefit design and claims probability distribution per employee per year (PEPY):

Employee contribution (PEPY)	\$1,200
Out-of-pocket max (OOPM)	\$1,600
Deductible	\$200
Member coinsurance	20%

Claims PEPY	Percent of Policies	Average Claims
\$0	10%	\$0
\$1 to \$50	20%	\$25
\$51 to \$200	15%	\$100
\$201 to \$1,000	20%	\$300
\$,1001 to \$3,000	15%	\$1,600
\$3,001 to \$7,200	10%	\$4,000
\$7,201 to \$20,000	5%	\$11,000
\$20,001 to \$40,000	3%	\$25,000
\$40,001 to \$100,000	2%	\$60,000

(b) (*1 point*) Calculate the minimum claims in 2021 required to reach the OOPM. Show your work.

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

- (c) (2 points) Calculate the 2021 PEPY claim liability for:
 - (i) Employees
 - (ii) ABC Consulting

Show your work.

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

ABC Consulting decides to offer an additional plan in 2022 to help lower costs. You are given:

- Annual claims trend is 0%
- No changes to the PPO plan
- The following benefit designs for the new high deductible health plan (HDHP) with a Health Savings Account (HSA):

Employee contribution (PEPY)	\$900
ABC Consulting's annual HSA contribution	\$100
Out-of-pocket max (OOPM)	\$14,000
Deductible	\$3,000
Member coinsurance	25%

- No change in the claims probability distribution for ABC Consulting's employees
- The following employee distribution for the two plans:

Claims PEPY	PPO	HDHP
\$0	20%	80%
\$1 to \$50	20%	80%
\$51 to \$200	60%	40%
\$201 to \$1,000	60%	40%
\$,1001 to \$3,000	80%	20%
\$3,001 to \$7,200	80%	20%
\$7,201 to \$20,000	80%	20%
\$20,001 to \$40,000	80%	20%
\$40,001 to \$100,000	100%	0%

- (d) (*3 points*) Calculate the estimated 2022 PEPY claims liability for:
 - (i) Employees in the PPO plan
 - (ii) Employees in the HDHP plan
 - (iii) ABC Consulting

Show your work.

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

- (e) (2 points)
 - (i) Calculate ABC Consulting's savings or cost from adding the HDHP. Show your work.

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

(ii) Interpret the results. Justify your response.

9. Fall 2022 DP #8

Skwire 23 – Pharmacy Claim Costs Skwire 7 – Pharmacy Benefits (US)

Question pertains to the Case Study.

(9 points)

- (a) (2 *points*) Describe the following layers of the pharmacy distribution channel and the typical payment mechanism used in each layer:
 - (i) Manufacturer

ANSWER:

(ii) Wholesaler

ANSWER:

(iii) Retailer

ANSWER:

(iv) Consumer

ANSWER:

(b) (1 point) Describe ways the Affordable Care Act (ACA) impacted pharmacy benefits.

You are an actuary responsible for pricing Quantum's individual pharmacy coverage.

You are given:

- Exhibit 8
- The same discounts apply to retail 30 day and mail 90 day supply
- \$0 dispensing fee for mail order
- 0% Sales tax
- \$0 Vaccination fee
- Quantum's Year 4 claim frequency and benefit design:

Supply	Drug Type	Claim Frequency	Rebates as % of Allowed	Member Cost Sharing
Retail 30 days	Generic	50%	0%	\$5
Retail 30 days	Preferred Brand	20%	20%	\$20
Retail 30 days	Non-Preferred Brand	10%	0%	45%
Retail 30 days	Specialty	5%	10%	25%
Mail 90 Days	Generic	10%	0%	\$10
Mail 90 Days	Preferred Brand	3%	20%	\$40
Mail 90 Days	Non-Preferred Brand	2%	0%	45%

- (c) (*3 points*) Calculate the Year 4 average per-script:
 - (i) Net plan liability
 - (ii) Member liability

Show your work.

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

You are given the following for Year 5:

- 10% of retail 30 day non-specialty prescriptions shift to mail order, evenly distributed across drug type
- 25% rebate for preferred drug types
- 0% utilization trend
- Cost trend is calculated using Year 2 to Year 4 data
- (d) (*3 points*) Calculate the Year 5 average per-script:
 - (i) Net plan liability
 - (ii) Member liability

State your assumptions. Show your work.

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

10. Fall 2022 DP #10

Skwire 21 – Medical Claim Costs ASOP #25 – Credibility Procedures

Question pertains to the Case Study.

(8 points)

(a) (*1 point*) Describe rating variables to consider when normalizing historical data to estimate medical claim costs.

ANSWER:

(b) (*1 point*) Describe recommended practices for credibility procedures according to ASOP 25.

Quantum's CEO reviewed the Year 3 and Year 4 Small Group HMO and PPO experience (excluding Legacy III). She does not think the PPO plan is fully credible. She proposes combining the PPO and HMO experience to estimate future claim costs for the PPO plan. She expects this will lower cost projections for the PPO plan.

You are given:

• Exhibit 7

Plan	РРО		HMO	
Year	Year 3	Year 4	Year 3	Year 4
Trend	4.5% per year			
Age/Gender	0.99	0.98	1.03	1.03
Area	0.99	1.00	0.98	0.99
Plan	1.00	1.00	0.98	0.99
Provider				
Reimbursement	1.00	1.00	1.05	1.05
Current Credibility	40%	60%	n/a	n/a
Proposed Credibility	30%	40%	15%	15%

(c) (*3 points*) Calculate the projected Year 6 PMPM cost for the PPO plan using the current credibility assumptions. Show your work.

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

(d) (*2 points*) Calculate the projected Year 6 PMPM cost for the PPO plan using the proposed credibility assumptions. Show your work.

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

(e) (*1 point*) Evaluate the CEO's proposal. Justify your response.

11. Fall 2022 DP #12

Skwire 6 – Dental Benefits (US) Skwire 22 – Dental Claim Costs

Question pertains to the Case Study.

(9 points)

(a) (*1 point*) Describe cost share and benefit plan provisions used to limit financial and selection risk in dental plans.

ANSWER:

You are an actuary working at Your Eyes and Smiles Insurance Company. You are analyzing claims experience for a PPO50 Plan renewal. You are given:

- Exhibits 1 4
- All members have met the waiting period for Class III services
- (b) (4 points) Calculate the Year 4 member cost and plan liability. Show your work.

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

(c) (*2 points*) Compare and contrast dental preferred provider organizations (PPO) and dental health maintenance organizations (DHMO) by completing the chart below:

	PPO	DHMO
Cost Management		
Fraud Potential		
Provider Contracting		
Benefit Richness		
Utilization		

Your Eyes wants to reduce its benefit expenses 10% by moving all members from the PPO to a DHMO with the following attributes:

- \$0 deductible
- Preferred providers only
- Tight network only
- No impact to billed charges
- (d) (2 points)
 - (i) Calculate the expected difference in plan liability. Show your work.

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

(ii) Assess whether Your Eyes will be able to achieve its benefit expense reduction target. Justify your response.

12. Spring 2023 DP #5

ASOP #23 – Data Quality Skwire 22 – Dental Claim Costs

(9 points)

(a) (1 point) Describe sources of data that can be used to estimate dental claim costs.

ANSWER:

(b) (2 points) Describe data quality considerations when selecting, analyzing, and relying on data for the purposes of developing dental claim costs.

ANSWER:

You are an actuary analyzing and pricing dental claims experience in the employer group market. The plan gives access to care both inside and outside its network by paying a discounted fee for service.

You are given:

Dental Plan Provision	PPO	HMO
Deductible per Member per Benefit Year		
Preferred Provider		
Class I Services	None	None
Class II and Class III Services	\$50	None
Non-Preferred Provider		
Class I Services	\$20	n/a
Class II and Class III Services	\$75	n/a
Annual Maximum per Member	\$1,500	None
Waiting Period		
Class I and Class II Services	None	None
Class III Services	12 Months	None

Dental Network - Member Coinsurance				
Class	PPO Preferred Provider	PPO Non-Preferred Provider	НМО	
Class I	0%	20%	0%	
Class II	10%	40%	5%	
Class III	40%	70%	20%	

Provider and Network Discount				
Provider	Network	PPO Discount	HMO Discount	
Preferred	Narrow	35%	45%	
Preferred	Broad	20%	25%	
Non-preferred	N/A	5%	N/A	

- Member A enrolled January 1, 20X1
- Member B enrolled January 1, 20X2

PPO Experience – 20X2					
Member	Member Incurred Date Provider Network		Procedure	Billed	
Wenner	Incurred Date	FIOVIDEI	INCLWOIK	Class	Charges
Member B	January 22	Preferred	Narrow	Class I	\$80
Member B	January 29	Preferred	Narrow	Class II	\$600
Member B	March 20	Preferred	Broad	Class I	\$50
Member A	March 22	Preferred	Narrow	Class I	\$80
Member A	March 22	Preferred	Narrow	Class I	\$50
Member B	July 24	Non-preferred	N/A	Class III	\$1,500
Member A	July 27	Preferred	Narrow	Class II	\$150
Member A	July 27	Preferred	Narrow	Class II	\$300
Member A	September 1	Preferred	Broad	Class III	\$1,100
Member A	October 8	Preferred	Narrow	Class III	\$2,500
Member B	November 22	Non-preferred	N/A	Class II	\$750

- (c) (4 points) Calculate the 20X2 PPO member and plan liability for:
 - (i) Member A
 - (ii) Member B

Show your work.

You are given:

HMO Plan Assumptions	
Annual utilization trend	4%
Annual unit cost trend (Narrow network)	6%
Annual unit cost trend (Broad network)	8%
Narrow network utilization	80%
Broad network utilization	20%
Non-benefit expense ratio (% of Premium)	10%
Profit margin (% of Premium)	5%

HMO Plan Utilization and Unit Cost in 20X2				
Class	Annual Services per 1,000 Members	Narrow Network: Average Cost per Service	Broad Network: Average Cost per Service	
Class I	4,500	\$85	\$120	
Class II	1,500	\$250	\$350	
Class III	500	\$2,500	\$3,000	

(d) (2 points) Calculate the 20X4 HMO premium. Show your work.

13. Spring 2023 DP #7

Skwire 3 – Product Development Skwire 11 – Group Life Benefits Skwire 20 – Pricing Group Insurance Skwire 24 – Life Claim Costs

(8 points)

(a) (1 point) List and describe the steps of the product development cycle.

ANSWER:

(b) (*l point*) Describe plan provisions that help mitigate moral hazard and financial risks in basic group term life insurance plans.

ANSWER:

- (c) (*1 point*) Describe tax implications in basic group term life for the:
 - (i) Employer

ANSWER:

(ii) Employee

You are an actuary developing a new basic group term life product.

- (d) (*1 point*) Describe considerations for the following elements of gross premium development:
 - (i) Estimated claims cost

ANSWER:

(ii) Administrative costs

ANSWER:

(iii) Commissions

ANSWER:

(iv) Risk and profit charges

You are developing the group term life premium for Company JKL with an April 1 effective date. The monthly claim rate is from an industry study completed over 10 years ago. You are given:

Company Census	
Male employees	100
Female employees	550

Pricing Factors	
Area	0.90
Effective date (April 1)	0.97
Industry	1.05
Case size	0.95

Pricing Assumptions	
Commissions (% of gross premium)	10%
Profit Target (% of gross premium)	5%
Expense target (% of net premium)	15%
Premium tax (% of gross premium)	2%

Monthly Claim Rate and Annual Insured Amount				
	Monthly Claim Rate per	Company Insured		
Age	\$1,000 Coverage	Amount ('000s)		
>25	0.041	\$1,460		
25-29	0.049	\$2,250		
30-34	0.057	\$3,000		
35-39	0.075	\$5,650		
40-44	0.111	\$4,520		
45-49	0.174	\$6,000		
50-54	0.271	\$3,800		
55-59	0.420	\$2,520		
60-64	0.565	\$4,010		
65-69	0.925	\$1,890		
70-74	1.665	\$1,550		
<75	4.165	\$ 980		

- (e) (*3 points*) Calculate the:
 - (i) Net manual claim cost.
 - (ii) Gross premium cost.

Show your work.

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

(f) (*1 point*) Recommend two improvements to the rate development. Justify your response.

14. Spring 2023 DP #8

Skwire 23 – Pharmacy Claim Costs

(9 points)

(a) (*1 point*) List and describe rating factors used when projecting pharmacy experience.

ANSWER:

(b) (*1 point*) Explain how an increased discount on Average Wholesale Price (AWP) can have a varying impact on member cost share and plan liability.

ANSWER:

You are analyzing the required premium increase for Company DEF from 20X2 to 20X3.

You are given:

Estimated allowed drug cost PMPM (20X2)	\$100.00
Drug discount (20X2)	73.0%
Drug discount (20X3)	75.0%
Dispensing fee (20X2)	\$5.00
Dispensing fee (20X3)	\$3.00
Rebate (% of allowed amount)	3.0%
Member coinsurance	20.0%

(c) (*1 point*) Calculate the change in the allowed amount due to the changes in contracting. Show your work.

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

(d) (2 points) Calculate the change in the effective member cost sharing due to the changes in contracting. Show your work.

You are given:

Annual claim cost trend	10%
Expenses (% of premium)	15%
Target profit (% of premium)	5%

(e) (2 points) Calculate the 20X3 premium PMPM. Show your work.

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

(f) (*l point*)

(i) List formulary management programs that can impact expected cost and utilization.

ANSWER:

(ii) Describe the advantages and disadvantages for each program.

ANSWER:

Company DEF's management is concerned about the impact increasing trend will have on premium. Additionally, given a tight labor market, DEF is concerned with the employee experience.

(g) (1 point) Recommend a formulary management program for DEF. Justify your response.

15. Fall 2023 DP #5b-c

Skwire 23 – Pharmacy Claim Costs Skwire 7 – Pharmacy Benefits (US)

(5 points)

You are a health actuary at QRS Insurance working on pharmacy pricing. You are given:

- No change in membership or plan design
- Average Wholesale Price (AWP) will increase 10% from Year 1 to Year 2

Cost Component	Tier	Year 1	Year 2
Contracted	Brands	AWP - 14%	AWP - 15%
Discounts	Generics	AWP - 70%	AWP - 73%
Dispensing Fee	Brands	\$1.00	\$1.06
(per script)	Generics	\$0.50	\$0.53
Administrative Fee	Brands	\$0.10	\$0.11
(per script)	Generics	\$0.10	\$0.11
Member cost share	Brands	40%	40%
Wieniber cost share	Generics	10%	10%

Claims Experience Year 1			
		Average Cost per Script Paid by	
Tier	Scripts	Member	
Brands	80,000	\$60.00	
Generics	400,000	\$7.00	

(b) (3 points) Calculate the change in QRS's cost from Year 1 to Year 2. Show your work.

QRS is considering either changing the formulary design or implementing a pharmacy valuebased insurance design to address rising premium costs.

(c) (2 points)

(i) Describe how each change will address rising premium costs.

ANSWER:

(ii) Identify circumstances when each change will be preferable for addressing rising claims costs.

16. Fall 2023 DP #8

Skwire 35 - Medical Claim Cost Trend

(9 points) You are an actuarial consultant assisting health insurance company ABC and self-insured employer group DEF evaluate their medical cost trends.

(a) (*1 point*) Describe the major purposes of trend analyses.

ANSWER:

(b) (*1 point*) Describe the advantages and disadvantages of using the component method approach to developing pricing trends.

ANSWER:

- (c) (1 point) Define:
 - (i) Unit cost trend

ANSWER:

(ii) Severity

ANSWER:

(iii) Mix of services

Company ABC has asked you to evaluate their core unit cost changes from 20X1 to 20X2. They have supplied you with the following:

			20X1	20X2
Description	20X1 Weight	20X2 Weight	Fee Schedule	Fee Schedule
CPT Code 1	45%	40%	\$95	\$105
CPT Code 2	22%	18%	\$145	\$140
CPT Code 3	8%	0%	\$1,750	N/A
CPT Code 4	20%	25%	\$230	\$265
CPT Code 5	0%	12%	N/A	\$1,900
CPT Code 6	5%	5%	\$3,500	\$2,800

- (d) (2 points) Calculate:
 - (i) Unit cost trend
 - (ii) Change in severity
 - (iii) Change in mix of services

State your assumptions. Show your work.

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

(e) (*1 point*) Identify four additional trend components ABC should consider when developing prospective pricing trends.

Group DEF is considering methods to offset increasing trends and would like to implement Alternative Payment Models (APMs) to reduce trend in the upcoming year.

(f) (1 point) Recommend whether DEF should pursue APMs. Justify your response.

ANSWER:

Group DEF is planning to announce that they are switching third-party administrators (TPA). Additionally, DEF is planning to change from offering its employees a single PPO plan to a single High Deductible Health Plan (HDHP). DEF will make this announcement during the Third Quarter of 20X3.

(g) (2 *points*) Describe the impact behavioral changes arising from this announcement may have on trends.

17. Spring 2024 DP #7

Skwire 3 – Product Development Skwire 23 – Pharmacy Claim Costs

The Excel spreadsheet has additional data and information applicable to this question.

(7 points)

(a) (2 points) List and describe the steps in the group medical product development cycle.

ANSWER:

You are consulting for a private employer that wants to emulate the public prescription drug plan for plan year 2024 in Quebec.

You are given:

- All families include an employee, a spouse, and two children.
- Every adult would pay the maximum premium under the public plan.
- Pharmacy costs are evenly distributed for each month of the year.

In the Excel spreadsheet, you are given plan information and experience.

(b) (5 points)

- (i) Construct a private employer plan that meets the private plan requirements by proposing values for the annual deductible (X), annual out-of-pocket maximum (Y), and family monthly employee premium (Z). Show your work.
- (ii) Verify the plan design meets the private plan requirements.

18. Spring 2024 DP #9

ASOP #41 – Act. Communications Skwire 26 – Exp. Rating & Funding Skwire 35 – Medical Claim Cost Trend ASOP #23 – Data Quality Skwire 5 – Medical Benefits (US)

The Excel spreadsheet has additional data and information applicable to this question.

(8 points)

(a) (*1 point*) Describe how consumer-directed health plans (CDHP) lower costs compared to non-CDHP plans.

ANSWER:

You are a consulting actuary working with a large, self-insured employer group.

(b) (2 points) Describe data quality considerations and disclosures needed when using claims experience provided by the employer group.

ANSWER:

You are given:

- In 20X1 and 20X2, the group only offered a copay-based plan design.
- In 4Q 20X2, the employer announced a change to full-replacement CDHP, effective in 20X3.
- No material changes to employee group member characteristics.

In the Excel spreadsheet, you are given claims experience.

(c) (2 points)

- (i) Calculate the annual and quarterly year-over-year claims PMPM trends. Show your work.
- (i) Explain the patterns in both annual and quarterly year-over-year claims PMPM trends.

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

Course GH 101 – Benefits and Pricing

Learning Objective 2: Manual Rates

(d) (*1 point*) Recommend adjustments when using the experience data. Justify your response.



(e) (*1 point*) Describe considerations for setting reserves when there is a material change in plan design.

ANSWER:

(f) (*1 point*) Identify disclosures required when issuing an actuarial report to the group.

19. Fall 2024 DP #1

Skwire 7 – Pharmacy Benefits (US) Skwire 23 – Pharmacy Claim Costs

The Excel spreadsheet has additional data and information applicable to this question.

(6 points)

(a) (*1 point*) Describe the layers of the prescription drug distribution channel.

ANSWER:

(b) (*1 point*) Describe types of formulary-related benefit designs in the prescription drug coverage market.

ANSWER:

You are a pharmacy pricing actuary for XYZ carrier that uses a PBM.

In the Excel spreadsheet, you are given plan information and experience.

- (c) (*3 points*) Calculate:
 - (i) The brand ingredient cost per script for 20X1 and 20X2.
 - (ii) The generic ingredient cost per script for 20X1 and 20X2.
 - (iii) XYZ's expected paid claims for 20X2.

Show your work.

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

XYZ leadership is concerned about increasing pharmacy costs.

(d) (1 point) Propose a revised tier structure for the PBM to implement. Justify your answer.

20. Fall 2024 DP #3

Skwire 21 – Medical Claim Costs GH101-100-25 – Setting Premium Rates

The Excel spreadsheet has additional data and information applicable to this question.

(10 points)

(a) (*1 point*) Describe the Affordable Care Act (ACA) modified community rating variables for non-grandfathered individual and small group coverage.

ANSWER:

You are pricing individual ACA products in a market where the company has participated for multiple years and has fully credible experience. The data team at your company believes it is best to provide as much data as possible to inform the pricing.

For the state you are pricing, you are provided 3 years of:

- Individual ACA claims on incurred basis
- Individual ACA claims on reported basis
- Individual ACA national industry claims data bought from external consultant
- Small group ACA claims on incurred basis
- Individual ACA premiums received
- Individual ACA premium earned
- (b) (*2 points*)
 - (i) Evaluate the appropriateness of using each data source for developing the individual ACA pricing for the upcoming year.

ANSWER:

(ii) Recommend which data source(s) to use. Justify your response.

The product team wants to change benefit cost shares and plan design features to make the product more attractive in the marketplace.

(c) (*1 point*) Describe how plan design can affect claim cost trends.

ANSWER:

You are pricing a Preferred Provider Organization (PPO) product. You are given:

- In network coverage is copay only
- Out of network coverage is deductible and coinsurance.
- Experience has been trended to the pricing year
- Assume copays do not accumulate to the out of pocket max

In the Excel spreadsheet, you are given projected claims experience and plan design information.

(d) (4 points) Calculate the gross premium PMPM. Show your work.

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

An analyst on your team is reviewing experience reports. They notice higher costs and utilization in gold plans compared to bronze plans.

- (e) (2 points)
 - (i) Describe reasons for these cost and utilization patterns.
 - (ii) Assess how you can reflect these utilization patterns in the premium development.

21. Fall 2024 DP #4

Skwire 6 – Dental Benefits (US) Skwire 22 – Dental Claim Costs

The Excel spreadsheet has additional data and information applicable to this question.

(7 *points*) You are an actuary for an insurer that offers group dental plans. Company ABC currently does not offer dental coverage and wants to implement a dental plan for 20X5.

In the Excel spreadsheet, you are given insurer experience and rating factors.

(a) (*3 points*) Calculate the annual claim cost PMPY for Company ABC for 20X5. Show your work.

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

After reviewing pricing proposals, Company ABC is instead considering adopting dental coverage on a voluntary basis.

(b) (*1 point*) Describe the advantages of a voluntary employee-pays-all PPO dental plan over a pay-as-you go dental care.

ANSWER:

- (c) (3 points)
 - (i) Critique the plan design for Company ABC if offered on a voluntary basis.

ANSWER:

(ii) Recommend modifications to the proposed plan design if offered on a voluntary basis. Justify your response.

GH 101 – Benefits and Pricing

COURSE GH 101 Curated Past Exam Questions

Learning Objective 3: Underwriting and Funding

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1. Fall 2020 DP-A #1

Skwire 34 – Health Risk Adjustment

(5 points) You are evaluating a small group medical market. Insurers A and B are the only two carriers in the market.

(a) (2 points) Describe criteria used in risk classification schemes.

ANSWER:

You are given the following experience:

	Insurer A		Insurer B			
Risk Class	Members	Average Claim Cost	Risk Factor	Members	Average Claim Cost	Risk Factor
Low	400	\$100	0.70	200	\$100	0.65
Average	500	\$150	0.90	250	\$150	0.95
High	100	\$500	1.10	50	\$500	1.20

(b) (*1 point*) Calculate the normalized relative risk factors for Insurers A and B. Show your work.

ANSWER:

(c) (*1 point*) Describe the need for health risk adjustment.

ANSWER:

(d) (*1 point*) Recommend whether or not to implement health risk adjustment. Justify your response.

2. Spring 2021 DP-A #3

Skwire 30 – Managing Selection

(9 points) You are an actuary for PQR Insurance and are evaluating the introduction of benefit choice at XYZ Company.

(a) (1 point) Describe how to measure selection and health status.

ANSWER:

(b) (*1 point*) Describe the impact employee contributions have on selection.

ANSWER:

You are given:

- XYZ is fully-insured by PQR.
- XYZ offers three health plans to its employees:

Health Plan	Benefits	Monthly Premium Rate
А	Lean	\$500
В	Moderate	\$600
С	Rich	\$700

- PQR sets Year 1 premium rates based on the expected benefit value difference between plans.
- Year 1 premiums are not adjusted for anticipated selection.
- XYZ contributes \$400 per month to the Year 1 premium for each employee.
- Employees contribute the difference between the selected plan's premium rate and XYZ's contribution.
- XYZ's employee census:

	Number of Employees	Relative Health Status
Low Risk	75	50%
Average Risk	100	100%
High Risk	25	250%
Composite (Total)	200	100%

Course GH 101 – Benefits and Pricing

Learning Objective 3: Underwriting and Funding

- Low risk employees choose Plan A.
- High risk employees choose Plan C.
- For Years 2-5, you are given:
 - PQR increases its rates by 10% each year.
 - XYZ maintains its per-employee contribution at \$400 per month.
 - Each year 5 employees move from Plan A to Plan B.
 - Each year 5 employees move from Plan B to Plan C.
- (c) (*2 points*) Create a table showing the following Year 1 values for PQR for each plan and in aggregate:
 - Total Monthly Premium
 - Total Monthly Cost
 - Cost as a Percent of Premium
 - Antiselection Risk

Show your work.

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

- (d) (*3 points*) Calculate the:
 - (i) Total cost and total premium for years 2 through 5.
 - (ii) Aggregate antiselection risk.

Show your work.

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

(e) (*1 point*) Describe how the antiselection spiral can be prevented.

ANSWER:

(f) (*1 point*) Design an employee contribution strategy that reduces the antiselection spiral. Justify your response.

ANSWER:

Course GH 101 – Benefits and Pricing

Learning Objective 3: Underwriting and Funding

3. Spring 2021 DP-A #5

Level Funding Skwire 34 – Health Risk Adjustment

(10 points) You are a pricing actuary for Insurer QRS evaluating whether to offer Level Funding Products.

- (a) (2 points) Describe:
 - (i) The advantages and disadvantages of self-funding.

ANSWER:

(ii) How level funding products benefit from the advantages of self-funding.

ANSWER:

(iii) How level funding products mitigate the disadvantages of self-funding.

ANSWER:

(b) (*1 point*) Describe the insurer's considerations when deciding to offer level funding products.

ANSWER:

You are given:

Area	Factor
Chicago	1.10
Phoenix	1.00
Los Angeles	0.95
New York	1.15

Age	Factor
0-20	1.00
21-30	0.90
31-45	1.10
45-64	1.75

Tobacco Status	Factor
Non-smoking	1.00
Smoker	1.50

- ASO Fees are \$50 PMPM
- ACA fees are \$3 PMPM
- Small Group base premium rate is \$400 PMPM
- Aggregate Stop Loss corridor is 120%

	Company A		Company B	
	Monthly Avg Cost		Monthly	Avg Cost
	Membership	PMPM	Membership	PMPM
Low Risk	650	\$50	250	\$125
Med Risk	300	\$250	625	\$450
High Risk	50	\$2,250	125	\$3,500

	Company A	Company B
Average Age	24.8	37.3
City	Phoenix	New York
Tobacco Usage	0%	55%

Coverage Cost Estimates (PMPM)				
Company A Company B				
Specific Stop Loss	\$90	\$182		
Aggregate Stop Loss	\$18	\$75		
Paid Claims Fund	\$150	\$520		
Reserve Fund	\$24	\$89		

(c) (2 points) Calculate the Relative Risk Factor for each company. Show your work.

- (d) (*3 points*) Calculate for each company:
 - (i) The ACA small group premium rate
 - (ii) The level funding premium rate

Show your work.

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

- (e) (2 *points*) Calculate the refund owed to Company A under the level funding product if the actual claims experience below Specific Stop Loss is:
 - (i) \$223 PMPM
 - (ii) \$177 PMPM
 - (iii) \$304 PMPM

Show your work. Explain your results.

4. Fall 2021 DP-A #7

Skwire 29 – Group UW Skwire 30 – Managing Selection

(7 points)

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

ANSWER:		
(ii) 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:

		Proposed		
	Current	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.

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.

5. Fall 2021 DP-A #8b-d

Level Funding

(5 points)

(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		Dispense	
Date	Scripts	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.

- (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.

6. Spring 2022 DP #4

GH101-101-25 – Exp. Rating & Funding

(7 points)

- (a) (*1 point*) Describe:
 - (i) Retention accounting

ANSWER:

(ii) Deficit recovery arrangement

ANSWER:

(iii) Unilateral arrangement

ANSWER:

(iv) Bilateral arrangement

You are a pricing actuary for Insurer J, and are reviewing the following claims experience for Company L:

	July 1, 2015	July 1, 2016	
	- June 30,	- June 30,	July 1, 2017 -
	2016	2017	June 30, 2018
Paid Premium (PMPM)	\$260	\$180	\$310
Average Number of Insured Members	4,160	4,100	4,312
Paid Claims (in \$'000s)	10,110	10,505	14,011
IBNR Balance at end of period (in			
\$'000s)	112	541	1,232
Pooled Premium (in \$'000s)	875	910	1,080
Pooled Claims (in \$'000s)	370	460	680
Credibility Weight	1/14	4/14	9/14

Administration	4% of premium
Claim Adjudication	5% of premium
Premium Taxes	3% of premium
Risk & Profit	2% of premium
Claims Trend	5% per year
Interest Rate	0% per year
Paid Premium PMPM from July 1, 2018 to June 30, 2019	\$325.00
Pooled Premium PMPM from July 1, 2018 to June 30, 2019	\$24.75
Pooled Premium PMPM from July 1, 2019 to June 30, 2020	\$27.50
Expected number of insured members for the period	
July 1, 2019 to June 30, 2020	4,400

Insurer J uses the deficit recovery arrangement method.

(b) (*2 points*) Calculate the accumulated surplus or deficit as of June 30, 2018 from the client perspective. Show your work.

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

(c) (*1 point*) Calculate the accumulated surplus or deficit as of June 30, 2018 from the insurer perspective. Show your work.

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

(d) (*3 points*) Calculate the total premium rates for the period July 1, 2019 to June 30, 2020. State your assumptions. Show your work.

7. Spring 2022 DP #13

Level Funding

(7 points) You are an actuary for GEX Company.

(a) (*1 point*) Describe the advantages and disadvantages of entering into a self-funding arrangement.

ANSWER:

You are given the following for a small group with a transitional medical plan:

Base net premium rate (PMPM)	\$300.00
Age factor	0.85
Industry factor	0.90
Area factor	1.00
Group-specific risk adjustment factor	0.87
Expenses (PMPM)	\$75.00

(b) (2 points) Calculate the group's transitional premium. Show your work.

You are given:

•	ACA fully insured premium:	\$500 PMPM
•	Level funded premium equivalent:	\$400 PMPM

- Specific Stop Loss (SSL) deductible: \$25,000
- Aggregate Stop Loss (ASL) deductible: 120%

You are choosing between a level premium quote and a fully insured quote.

You are given:

	PMPM
Fully insured premium	\$500
Level funded premium equivalent	\$400
Stop loss premium	\$100
Administrative and regulatory fees	\$55
# of employees	48
# of members covered	96

(c) (*1 point*) Calculate the expected cost components of the level funded premium equivalent. Show your work.

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

You are given:

	Actual Incurred Claims
January	\$3,000
February	\$250,000
March	\$50,000
April	\$50,000
May	\$45,000
June	\$20,000
July	\$50,000
August	\$50,000
September	\$60,000
October	\$25,000
November	\$60,000
December	\$70,000
Total	\$733,000

Actual experience after 1 year		
Claimants with incurred claims >\$25,000		
	Incurred claims	
Claimant 1	\$450,000	
Claimant 2	\$75,000	
Claims paid by ASL coverage	\$0	

(d) (*2 points*) Calculate the level funded surplus or deficit at the end of the settlement. Show your work.

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

Course GH 101 – Benefits and Pricing

Learning Objective 3: Underwriting and Funding

You decide to move forward with a level funded approach.

(e) (*1 point*) Recommend next steps for infrastructure to make sure the level funding approach is successful.

8. Fall 2022 DP #5

Skwire 30 – Managing Selection

(5 points) You are an actuary for PQR Insurance and are evaluating the introduction of benefit choice at XYZ Company.

You are given:

- XYZ is fully-insured by PQR.
- XYZ offers three health plans to its employees:

Health Plan	Benefits	Monthly Insurer Premium Rates
А	Lean	\$500
В	Moderate	\$600
С	Rich	\$700

- Year 1 premiums are not adjusted for anticipated selection.
- XYZ will contribute \$400 per month.
- XYZ's employee census:

Risk Group	# of Employees	Relative Health Status (Morbidity)	Year 1 Plan		
1	600	50%	А		
2	200	70%	В		
3	300	100%	В		
4	200	225%	С		
5	50	320%	С		

• PQR increases premium rates by 5% in Year 2.

The CEO of XYZ is concerned about expenses and is considering the following strategies for Year 2:

Strategy 1

- XYZ reduces premium contributions by \$50 per month.
- Risk Groups 3 and 5 are expected to stay in their current plan.
- Risk Groups 2 and 4 are expected to move to the next lower-priced option.

Strategy 2

- XYZ adds another lean benefit option, with a premium rate of \$450.
- Risk Group 2 is expected to move to the new plan.
- Half of the employees in Risk Group 1 are expected to move to the new plan.
- (a) (2 *points*) Calculate the selection load needed in Year 2 for PQR to break even under Strategy 1. Show your work.

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

Course GH 101 - Benefits and Pricing

Learning Objective 3: Underwriting and Funding

(b) (*2 points*) Calculate the selection load needed in Year 2 for PQR to break even under Strategy 2. Show your work.

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

- (c) (*1 point*) Evaluate each strategy from the perspective of:
 - (i) Employees at XYZ

ANSWER:

(ii) PQR Insurance

ANSWER:

(iii) XYZ Company's CEO

ANSWER:

Justify your response.

9. Fall 2022 DP #9c-f

The Role of the Actuary in Self-Insurance Skwire 29 – Group UW Level Funding

Question pertains to the Case Study.

(6 points) You are an actuary for Quantum. You are evaluating experience for Company REF, a client of Quantum with 90 employees. At this year's renewal, Quantum is considering whether to keep Company REF on their ACA small group HMO block of business or offer them Quantum's new level funding products.

You are given the credibility weighted medical and Rx claims cost for Year 4 below:

- Year 4: \$300.47 PMPM
- (c) (*1 point*) Describe the underwriting considerations applicable to a level funding product.

ANSWER:

- (d) (*1 point*) Describe ways that Quantum can mitigate the risk of high cost claims if the group selects a:
 - (i) Fully insured small group HMO product

ANSWER:

(ii) Level funding product

ANSWER:

(iii) Self-funded product

Company REF's high cost claim experience is:

• Year 3

	-	
0	Employee A	\$75,000
0	Employee B	\$100,000

- Employee C \$80,000
- Year 4

0	Employee A	\$80,000
0	Employee B	\$30,000

• Employee D \$100,000

You are given:

٠	Quality Improvement Expense (QIE):	\$20 PMPM
٠	General Administrative Expense (excluding QIE):	\$100 PMPM
٠	Pharmacy Rebates:	\$5 PMPM
٠	State Risk Adjustment Transfer Payment:	\$15 PMPM
٠	Broker Commission:	2% of premium
٠	Premium Tax:	3% of premium
٠	Trend	0% per year
٠	Aggregate Stop Loss Corridor:	120%
٠	Specific Stop Loss Deductible:	\$75,000
	Quantum will incur the same level of administrative	agets for the small group UMC

• Quantum will incur the same level of administrative costs for the small group HMO and the level funding product

- (e) (3 points) Calculate the base premium for Company REF in their Year 5 renewal under:
 - (i) Fully insured ACA small group HMO product
 - (ii) Level funding product

State your assumptions. Show your work.

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

(f) (1 point) Recommend a product offering to Quantum. Justify your recommendation.

10. Spring 2023 DP #3

Level Funding

GH101-101-25 – Exp. Rating & Funding

(8 points)

(a) (*2 points*) Compare and contrast level funding and ACA community rating from a rate development perspective.

ANSWER:

Employer ABC is a manufacturing company with 47 employees. Employer ABC was acquired by Company XYZ on June 30, 20X4.

Company XYZ has a unilateral arrangement with the insurance carrier.

You are given:

Company XYZ	July 1, 20X1 - June 30, 20X2	July 1, 20X2 - June 30, 20X3	July 1, 20X3 - June 30, 20X4
Average Number of Insured Members	4,152	4,092	4,229
Paid Premium PMPM	\$250	\$275	\$300
Paid Premiums ('000s)	\$12,450	\$13,500	\$15,225
Paid Claims ('000s)	\$10,075	\$10,525	\$13,900
IBNR End of Period Reserve ('000s)	\$110	\$540	\$1,200
Pooled Premiums ('000s)	\$872	\$933	\$1,091
Pooled Claims ('000s)	\$375	\$450	\$675
Credibility Weight	1/9	1/3	5/9

Employer ABC	July 1, 20X1 - June 30, 20X2	July 1, 20X2 - June 30, 20X3	July 1, 20X3 - June 30, 20X4
Average Number of Insured Members	35	40	47
Paid Premium PMPM	\$250	\$275	\$300
Paid Premiums ('000s)	\$105	\$130	\$165
Paid Claims ('000s)	\$53	\$83	\$112
IBNR End of Period Reserve ('000s)	\$1	\$5	\$11
Pooled Premiums ('000s)	\$8	\$11	\$15
Pooled Claims ('000s)	\$3	\$5	\$7
Credibility Weight	1/9	1/3	5/9

Course GH 101 – Benefits and Pricing

Learning Objective 3: Underwriting and Funding

Retention (% of Paid Premium)

Administration	5.00%
Claim Adjudication	4.00%
Premium Taxes	2.00%
Risk & Profit	3.00%

- (b) (*3 points*) Calculate the accumulated surplus or deficit at June 30, 20X4 including XYZ's acquisition of Employer ABC from:
 - (i) The client perspective.
 - (ii) The insurer perspective.

Show your work.

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

You are Given:

Annual Claims Trend	7.00%
Annual Interest Rate	0.00%
Paid Premium PMPM for July 1, 20X4 - June 30, 20X5	\$325.00
Pooling Premium PMPM for July 1, 20X4 - June 30, 20X5	\$24.75
Pooling Premium PMPM for July 1, 20X5 - June 30, 20X6	\$27.50
Expected number of insured members for July 1, 20X5 - June 30, 20X6	4,350

(c) (*2 points*) Calculate the PMPM rates for the period July 1, 20X5 to June 30, 20X6. Show your work.

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

(d) (*1 point*) Evaluate whether a deficit recovery, unilateral, or bilateral arrangement would have been most beneficial to the insurance carrier. Justify your response.

11. Spring 2023 DP #9

The Role of the Actuary in Self-Insurance

(7 points)

- (a) (2 points) Recommend whether each of the following businesses should fully insure or self-insure their health benefits. Justify your response.
 - (i) A chain store with locations across the country, with more than 500 retail and corporate employees.

ANSWER:

(ii) A small boutique with a dozen employees looking to reduce costs.

ANSWER:

(iii) A company with over 500 employees and seasonal spikes in revenue.

ANSWER:

(b) (*1 point*) Describe the effects which magnify the trend for stop-loss coverage compared to overall trend.

You are an actuary for LMN Insurance, which specializes in selling stop loss coverage. Big Customer has a specific stop loss policy with a \$100,000 deductible that covers medical and pharmacy claims. Big Customer has stated they will not renew for 20X4 unless the rate increase is under 10%.

Range of Claims PEPY	Frequency	Inpatient	Outpatient	Physician	Non- Specialty Drugs	Specialty Drugs	Total
\$0	0.18987	\$0	\$0	\$0	\$0	\$0	\$0
\$1-\$100	0.05000	0	15	23	13	0	51
\$101-\$500	0.23280	25	89	66	45	16	241
\$501-\$1,000	0.15000	272	145	113	87	105	722
\$1,001- \$5,000	0.14000	824	538	529	245	519	2,655
\$5,001- \$10,000	0.12400	1,902	960	1,200	352	750	5,164
\$10,001- \$25,000	0.04510	9,837	2,937	1,969	483	1,653	16,879
\$25,001- \$50,000	0.03750	21,345	7,634	4,524	872	3,567	37,942
\$50,001- \$100,000	0.02275	36,421	9,360	7,202	1,265	23,232	77,480
\$100,001- \$250,000	0.00627	74,532	41,576	13,610	2,959	36,323	169,000
\$250,001- \$500,000	0.00100	205,362	104,217	17,306	5,623	53,963	386,471
\$500,001- \$1,000,000	0.00070	436,352	144,165	24,532	12,634	150,692	768,375
\$1,000,000+	0.00001	870,256	252,663	30,576	36,324	435,695	1,625,514
					Ave	rage PEPY	\$7,126

You are given the following 20X3 claims probability distribution per employee per year.

You are given the service category trends below. Contracting for specialty drug reimbursement is still in negotiations.

	Annual Trend
Inpatient	3%
Outpatient	4%
Physician	4%
Non-Specialty Drugs	1%
Specialty Drugs	To Be Determined

Administrative cost and other retention items do not impact the calculation.

(c) (*3 points*) Calculate the maximum annual trend for Specialty Drugs to meet Big Customer's rate increase target. Show your work.

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

Due to the expected release of a new blockbuster drug in 20X4, LMN is unable to meet Big Customer's rate increase target.

(d) (*1 point*) Recommend two changes to policy provisions that could reduce the rates. Justify your response.

12. Fall 2023 DP #3a,d-e

Skwire 26 – Exp. Rating & Funding

The Excel spreadsheet has additional data and information applicable to this question.

(6 points) You are an actuary pricing group health insurance.

- (a) (*l point*)
 - (i) Contrast manual and experience rating.

ANSWER:

(ii) Contrast prospective and retrospective rating.

ANSWER:

You are given:

- Your company's rate manual for 20X4, provided in the Excel spreadsheet
- Experience period data (July 1, 20X2 to June 30, 20X3):

	Group 1	Group 2	Group 3
Effective date for renewal rates	1/1/20X4	1/1/20X4	4/1/20X4
Annual exposure - employee only	30	1,200	125
Annual exposure - employees +			
dependents	10	650	200
Annual exposure - total employees	40	1,850	325
Total claims	\$74,000	\$3,683,000	\$775,000
Amount of claims > \$50,000	\$0	\$513,000	\$108,000
Net claims < \$50,000	\$74,000	\$3,170,000	\$667,000
Total premium	\$88,000	\$4,152,000	\$885,600
Age/sex factor	0.90	0.95	1.10
Region	1	3	4
Benefit Plan Deductible	\$500	\$100	\$250

(d) (*3 points*) Calculate renewal rates for Groups 1, 2, and 3 on a composite per employee basis using the prospective rating method. Show your work.

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

Course GH 101 - Benefits and Pricing

Learning Objective 3: Underwriting and Funding

Group 2 is considering a retrospective premium refunding arrangement. You are given the following:

Contribution to rate stabilization reserve (% of gross premium)	3.0%
Prior rate stabilization reserve balance	\$875,000

(e) (2 *points*) Calculate what the retrospective refund as of June 30, 20X3 would have been for Group 2 under a retrospective premium refunding arrangement. Show your work.

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

13. Fall 2023 DP #6

The Role of the Actuary in Self-Insurance

The Excel spreadsheet has additional data and information applicable to this question.

(9 points) You have been retained by Company XYZ to help manage their medical claims risk.

(a) (1 point) Describe the advantages and disadvantages of self-funding.

ANSWER:

(b) (2 points) Describe drivers of cash-flow volatility when self-funding.

ANSWER:

- (c) (2 *points*) Explain cash flow considerations for newly self-funded groups focusing on the following areas:
 - (i) Claims patterns in the first year

ANSWER:

(ii) Claims seasonality

ANSWER:

(iii) Establishing a claims reserve

You recommend Company XYZ purchase both specific and aggregate stop loss. The aggregate stop loss will have a 125% attachment point. The table and associated chart in the Excel spreadsheet illustrate the ratio of actual to expected claims for 1,000 groups.

- (d) (2 points)
 - (i) Sketch how specific stop loss and aggregate stop loss mitigate claims risk by completing the chart provided in the Excel spreadsheet.

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

(ii) Explain how each stop loss arrangement impacts the distribution of exposures.

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

XYZ's CFO is focused on the risk from claims volatility and wants to limit the risk through specific stop loss. He proposes using the lowest attachment point of \$25,000 to mitigate the risk as much as possible.

XYZ has 5,000 members.

You have been provided the following expected large claims exposure:

Speci	Specific Stop Loss Expected Claims Level Retained		Ove	pected Claims r Specific Stop Loss Level	ific Stop Loss mium PMPM	
\$	25,000	\$	10,600,000	\$	6,520,000	\$ 150.00
\$	50,000	\$	12,960,000	\$	4,160,000	\$ 100.00
\$	100,000	\$	14,940,000	\$	2,180,000	\$ 55.00
\$	250,000	\$	16,300,000	\$	820,000	\$ 15.00
	none	\$	17,120,000	\$	-	\$ -

(e) (2 points)

(i) Critique the CFO's plan to use the lowest attachment point.

ANSWER:

(ii) Recommend an alternative attachment point. Justify your response.

14. Fall 2023 DP #7b-c

ASOP #12 – Risk Classification Skwire 34 – Health Risk Adjustment

(4 points) You are a government actuary working on health risk adjustment for ACA plans.

You are developing a new risk classification model to calculate ACA risk transfer payments.

- (b) (2 points) Describe considerations under ASOP 12 for:
 - (i) Establishing risk classes

ANSWER:

(ii) Testing the risk classification system

ANSWER:

Your new model produces the following average monthly claim costs:

- Low Risk members cost \$150
- Average Risk members cost \$300
- High Risk members cost \$600

You are given the number of enrollees in ACA-compliant plans by risk category and insurer for the 20X1 plan year:

	Low Risk	Average Risk	High Risk
Insurer A	500	700	50
Insurer B	100	300	150
Insurer C	700	200	400
Insurer D	800	100	400

(c) (2 points) Calculate each insurer's relative risk factor. Show your work.

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

15. Spring 2024 DP #3

Skwire 30 – Managing Selection

The Excel spreadsheet has additional data and information applicable to this question.

(6 points)

- (a) (*1 point*) Describe:
 - (i) Reasons a benefits package costs more when individuals are given choices.

ANSWER:

(ii) Four factors that influence employee choice.

ANSWER:

You are a benefits consultant, working with two employer groups (OldCo and NewCo) and Insurer 2-Choices. Insurer 2-Choices offers a PPO and an HSA product.

In the Excel spreadsheet, you are given assumptions from Insurer 2-Choices' rate manual and information on OldCo's offerings.

- (b) (*3 points*) Calculate the effective premium change for the HSA in 20X2 using the following scenarios:
 - (i) 2-Choices insures both the PPO and the HSA
 - (ii) 2-Choices insures the HSA while the PPO is insured by a competitor

Show your work.

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

In the Excel spreadsheet, you are given rating information for NewCo.

(c) (*2 points*) Calculate the amount of buy-down effect per employee that occurs in 20X2. Show your work.

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

Course GH 101 – Benefits and Pricing

Learning Objective 3: Underwriting and Funding

16. Spring 2024 DP #6

GH101-101-25 – Exp. Rating & Funding

The Excel spreadsheet has additional data and information applicable to this question.

(8 points)

(a) (*1 point*) Compare and contrast prospective experience rating and retrospective experience rating.

ANSWER:

(b) (*1 point*) List and describe the three retrospective experience rating methods.

ANSWER:

In the Excel spreadsheet, you are given plan experience.

- (c) (*3 points*) Calculate the accumulated surplus or deficit as at June 30, 20X3 from the perspective of the:
 - (i) Client
 - (ii) Insurer

Show your work.

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

The client has a deficit recovery arrangement where:

- Surplus is accumulated over 1 year to offset future deficits.
- Deficits are recovered over 2 years.
- (d) (*3 points*) Calculate the PMPM premium rate for July 1, 20X4 to June 30, 20X5 under the deficit recovery arrangement. Show your work.

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

17. Fall 2020 DP-A #5d-e

GH101-101-25 - Exp. Rating & Funding

(4 points) You are the consulting actuary at Skyfall assigned to Royale Health.

Royale Health offers coverage options for large group employers, including fully insured options and administrative services only (ASO) options. Health coverage plan options offered by Royale Health include medical and prescription plans. Various exhibits from Royale's rate manual are provided below:

Exhibit 1 - Non-Claim Expenses (2020)			
General Administration	7.2%		
Profit Margin	3.0%		
Premium Tax	1.8%		
ACA Health Insurer Tax	2.0%		
Broker Load	1.5%		

Exhibit 2 - Manual Claim Costs PMPM (Q1 2020)					
Plan	Product Type	Manual Rate			
PPO500	РРО	\$399.50			
PPO1000	РРО	\$370.15			
PPO2000	РРО	\$320.20			
HDHP2500	HDHP	\$260.25			
HDHP3000	HDHP	\$238.50			
HDHP3500	HDHP	\$215.20			

Exhibit 3 - Calendar Year Trend Factors					
Calendar Year	Allowed Medical Trend	Allowed Pharmacy Trend			
2018	10.90%	4.50%			
2019	6.70%	8.10%			
2020+	5.50%	9.20%			

Abeesee Company is fully insured with Royale Health. You have been asked to revise the pricing of its plan. Consider the 2018 experience is fully credible.

You are given the following email:

Royale Health Email From: Le Chiffre <lechiffre@RoyaleHealth.com> To: You <JB007@Skyfall.com> Sent: March 21, 2020 Subject: Medical Renewal

The renewal of Abeesee Company, one of our important clients, is due on July 1st. I have attached the past experience of its PPO500 plan for your review.

	Jan 1, 2017 – Dec 31, 2017	Jan 1, 2018 – Dec 31, 2018	Jan 1, 2019 – Dec 31, 2019
Paid Premium Per Member Per Month (PMPM)	\$275	\$300	\$325
Average Number of Insured Members	4,106	4,118	4,378
Paid Premiums (in \$000)	\$13,550	\$14,825	\$17,075
Paid Claims (in \$000)	\$11,125	\$12,750	\$13,950
IBNR Balance at end of period (in \$000)	\$125	\$625	\$1,300
Pooled Premiums (in \$000)	\$1,152	\$1,260	\$1,451
Pooled Claims (in \$000)	\$275	\$550	\$625

Thanks, Le Chiffre

Additional information	
Paid Premium PMPM from Jan 1, 2019 to Dec 31, 2019	\$325.00
Pooled Premium PMPM from Jan 1, 2019 to Dec 31, 2019	\$30.25
Pooled Premium PMPM from Jan 1, 2020 to Dec 31, 2020	\$33.00
Expected number of insured members for the period from Jan 1, 2020 to Dec 31, 2020	4,450

(d) (*3 points*) Calculate the renewal rate for January 1, 2020 to December 31, 2020. Show your work.

ANSWER:

(e) (*1 point*) Recommend whether or not Abeesee should move to a self-insured plan. Justify your response.

ANSWER:

Course GH 101 – Benefits and Pricing

Learning Objective 3: Underwriting and Funding

18. Fall 2024 DP #2

Skwire 30 – Managing Selection Skwire 3 – Product Development

The Excel spreadsheet has additional data and information applicable to this question.

(10 points) Company ABC historically offered only one benefit option and is planning to introduce a second benefit plan for their employees. This plan will have a richer benefit but drive savings through a narrower, lower cost network and stronger medical management.

(a) (2 points) Describe factors that influence employees' choice of medical plans.

ANSWER:

In the Excel spreadsheet, you are given plan experience and employee information.

- (b) (*1 point*) Calculate the following using the information given:
 - (i) The expected PEPY cost for each benefit plan option.
 - (ii) The total expected claims cost for Company ABC.

Show your work.

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

After reviewing the analysis, the CFO of Company ABC makes the following statement, "The new plan with the narrow network is so much cheaper per person than our existing plan. Let's eliminate the existing plan. We'll save millions!"

(c) (2 points) Calculate the savings from the CFO's proposal. Show your work.

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

(d) (2 points) Critique the CFO's statement.

ANSWER:

- (e) (3 points)
 - (i) Describe stages of the product development cycle by completing the tables below:

Design Stage	Description
Product Structure	
Variables in Design	
Contribution Requirements	

Build Stage	Description
Project Enrollment	
Price the Product	
Financial Assessment	

(ii) Recommend an action to mitigate antiselection using one of the phases from the table in part (i).

19. Fall 2024 DP #6

Calculated Risk - Driving Decisions

(4 points)

(a) (2 points) Describe the key findings in the Total Risk Analysis research results.

ANSWER:

You are given:

- Risk Analysis for Best Estimate: \$500
- Budget: \$512.50

	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5	Total
	>2 Std Dev	1-2 Std Dev	+/- 1 Std	1-2 Std	>2 Std Dev	
Scenario	below	below Mean	Dev from	Dev above	above	
Description	Mean		Mean	Mean	Mean	
Scenario						
Probability	2.3%	13.6%	68.2%	13.6%	2.3%	100.0%
Candidate						
Value	\$ 460.00	\$ 479.00	\$ 500.00	\$ 521.00	\$ 537.00	\$ 500.00
Expected						
Gain/Loss	\$ 52.74	\$ 33.96	\$ 12.81	\$ (8.34)	\$ (24.13)	\$ 12.87
Probability of						
Exceeding						
Budget	0.0%	0.2%	15.3%	73.9%	96.4%	22.7%
Probability of						
Losing >						
\$6M	0.0%	0.0%	2.1%	37.5%	80.7%	8.4%

(b) (*1 point*) Interpret:

(i) Expected variance to budget

ANSWER:

(ii) Chance of exceeding budget

ANSWER:

(c) (*1 point*) Recommend a different budget. Justify your answer.

GH 101 – Benefits and Pricing

COURSE GH 101 Curated Past Exam Questions

Learning Objective 4: Employee Benefits

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1. Fall 2020 DP-C #3

Consumers to the Rescue? A Primer on HDHPs and HSAs GH101-106-25 – Handbook of EE Ben. GH101-103-25 – ER Cont. Strategies Skwire 35 – Medical Claim Cost Trend

(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:

Course GH 101 – Benefits and Pricing

Learning Objective 4: Employee Benefits

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

2. Fall 2020 DP-C #6

GH101-103-25 – ER Cont. Strategies GH101-104-25 – EE Benefits Strategy Skwire 5 – Medical Benefits (US)

- (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:

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

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

3. Spring 2021 DP-C #4

GH101-103-25 – ER Cont. Strategies

(9 points)

(a) (*1 point*) Compare and contrast defined benefit and defined contribution strategies from the employer's perspective.

ANSWER:

(b) (*2 points*) List and describe considerations for an employer's payroll contribution strategy.

ANSWER:

(c) (*1 point*) Describe advantages and disadvantages of a spousal surcharge from the employer's perspective.

ANSWER:

Dr. No's Herbal Tea is a startup firm, co-founded by Dr. No and Dr. Honey. Dr. No's currently employs 45 non-union employees. Dr. No's Herbal Tea Company (Dr. No) is considering changes to its payroll contribution strategy and has retained you to assist with this evaluation.

Dr. No's started offering a fully insured managed care health plan to its employees in 2016. Dr. No's provides all employees (census shown below) with a subsidy of \$170 monthly per employee towards the 2021 health insurance premium shown below:

Exhibit – Monthly Premium					
SingleEE + SpouseEE + ChildrenFamily					
\$351 \$705 \$452 \$857					

Dr. No is considering the following income-based payroll contribution strategy:

Annual Salary	Employer Contribution
<\$35,000	25.0%
\$35,000 - \$50,000	22.5%
\$50,000 - \$80,000	20.0%
> \$80,000	17.5%

Course GH 101 – Benefits and Pricing

Learning Objective 4: Employee Benefits

	Exhibit – Census					
Sex	Age	# of Employee s	Annual Salary	Family Composition		
F	<25	0	N/A	N/A		
F	25-29	2	28,500	Single		
F	30-34	5	33,000	EE + Spouse		
F	35-39	7	37,500	Family		
F	40-44	3	48,400	Family		
F	45-49	2	55,900	Family		
F	50-54	1	66,700	Family		
F	55-59	1	79,300	EE + Spouse		
F	60-64	1	91,700	EE + Spouse		
М	<25	1	22,000	Single		
М	25-29	0	N/A	N/A		
М	30-34	5	33,000	EE + Spouse		
М	35-39	6	37,000	Family		
М	40-44	6	46,750	Family		
М	45-49	1	55,400	Family		
М	50-54	2	67,600	Family		
М	55-59	1	78,250	EE + Spouse		
М	60-64	1	90,500	EE + Spouse		
	Total	45				

- (d) (*3 points*) Calculate the change in Dr. No's average premium contribution per employee relative to the current 2021 subsidy if Dr. No adopts:
 - (i) a defined benefit approach where Dr. No contributes 22% toward premium
 - (ii) the income-based payroll contribution strategy provided above

Show your work. State your assumptions.

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

(e) (*1 point*) Critique the income-based payroll contribution strategy provided above.

ANSWER:

(f) (*1 point*) Recommend a payroll contribution strategy for Dr. No. Justify your response.

4. Spring 2021 DP-C #5a

GH101-106-25 – Handbook of EE Ben.

(a) (2 points) List the steps in a functional approach to designing a benefit plan.

ANSWER:

The remaining parts of this question are no longer on the syllabus

5. Spring 2022 DP #2

Consumers to the Rescue? A Primer on HDHPs and HSAs

(7 points)

(a) (*1 point*) List characteristics of a high deductible health plan (HDHP).

ANSWER:

(b) (2 points) Describe examples of consumer behaviors demonstrated by individuals enrolled in HDHPs.

ANSWER:

(c) (*1 point*) Recommend actions to make the HDHP more attractive to employees.

You are given:

- The employer offered benefit designs in Exhibit 1 (see below).
- The employer pays the entire premium for both plans.
- The annual claims history for a family of two:

Claimant	Month of Service	Service Category	Allowed Cost	
Employee	January	Office Visit	\$300	
Employee	yee January Preventive Care		\$100	
Spouse	January	Chiropractic	\$150	
Spouse	February	Office Visit	\$200	
Spouse	March	Chiropractic	\$150	
Spouse	April	Preventive Care	\$100	
Spouse	May	Chiropractic	\$150	
Spouse	June	Emergency Care	\$2,350	
Spouse	July	Chiropractic	\$150	
Spouse	September	Chiropractic	\$150	
Employee	October	Preventive Dental	\$150	
Spouse	November	Chiropractic	\$150	

- All claims are in-network.
- (d) (*3 points*) Calculate the family's total out-of-pocket cost for each of the following employer provided plan types:
 - (i) PPO
 - (ii) HDHP

Show your work.

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

	Exhibit 1 - Medical Benefits			
	PPO		HDHP	
	In-Network	Out-of-Network	Benefits	
Annual Deductible Deductible does not apply to services denoted with *	\$500 per member or \$1,500 per family	\$500 per member or \$1,500 per family	\$3,000 per member or \$6,000 per family	
Member Coinsurance	10%	30%	0%	
Out-of-Pocket Limit Benefits	\$2,500 per member or \$7,500 per family	\$4,000 per member or \$12,000 per family	\$3,000 per member or \$6,000 per family	
Office Visits	\$25 copay per visit	30% coinsurance	0% coinsurance after deductible	
Preventative Care Services	Covered in Full *	Covered in Full *	Covered in Full *	
Maternity Care Routine outpatient prenatal and postpartum visits	Covered in Full *	Covered in Full *	Covered in Full *	
Chiropractic/Manipulative Therapy 10 visits per calendar year	10% coinsurance	30% coinsurance	0% coinsurance after deductible	
Acupuncture 12 visits per calendar year	10% coinsurance	30% coinsurance	0% coinsurance after deductible	
Emergency Care	\$150 copay + 10% coinsurance			
Skilled Nursing 60 days per calendar year	10% coinsurance	30% coinsurance	0% coinsurance after deductible \$10,000 Calendar Year Maximum	
Adult Vision l routine exam per year; annual hardware allowance	\$10 primary/ \$10 specialty copay per visit\$10 primary/ \$10 specialty copay per visit\$100 toward glasses or contact lenses*\$100 toward glasses or contact lenses*		\$20 primary/ \$20 specialty copay per visit \$100 toward glasses or contact lenses*	
Pediatric Vision 1 routine exam per year; Hardware – 1 pair oflenses and frames or contacts per year	Covered in Full *	Covered in Full *	Covered in Full *	
Pediatric Dental Preventative and restorative services	Preventative services covered in full * Other services subject to dental deductibleand coinsurance	Preventative services covered in full * Other services subject to dental deductibleand coinsurance	Preventative services covered in full * Other services subject to dental deductibleand coinsurance	
Prescription Drugs Cost per 30-day supply	Filled at pharmacy: \$10 preferred generic*; 20% preferred brand*including specialty brand* Filled by mail order: \$5 preferred generic*; 15% preferred brand*including specialty brand*	Filled at pharmacy: 20% coinsurance; including specialtybrand*	0% coinsurance after deductible	

* Deductible does not apply to services denoted with *

For members on a family policy, both the deductible and OOP limit are satisfied at the earlier of (1) the member satisfying the individual deducible/OOP limit or (2) the entire family satisfying the family deductible/OOP limit

6. Fall 2022 DP #1a-b

GH101-106-25 – Handbook of EE Ben. Consumers to the Rescue? A Primer on HDHPs and HSAs

(5 points)

(a) (*1 point*) Describe the need for a functional approach in designing an employee benefits plan.

ANSWER:

(b) (2 points)

(i) Compare and contrast the features of Health Savings Accounts (HSA) and Health Reimbursement Accounts (HRA).

ANSWER:

(ii) Describe the impact of these features on an employee.

7. Fall 2022 DP #4

GH101-106-25 – Handbook of EE Ben. GH101-104-25 – EE Benefits Strategy GH101-103-25 – ER Cont. Strategies

(10 points) ABC is a mid-sized employer in an industry with a competitive labor market. ABC is evaluating its employee benefit program and strategy as it prepares to renew its fully insured health plans for 2023.

- (a) (*1 point*) Describe reasons why an employee benefit program is of strategic importance to ABC from the perspective of:
 - (i) Human resources

ANSWER:

(ii) Risk management

ANSWER:

(b) (*2 points*) List and describe factors ABC should consider when determining its level of contributions to employee benefit premiums.

ABC offers two medical plans: PPO and PPO with HSA. ABC pays a portion of the medical premium, varying by employee salary and coverage tier.

You are given:

2022 I EI WI Wiedical I Teillium by I fail and Coverage Tiel			
Plan	Employee Employee +		Employee +
riali	Only	Spouse	Family
PPO with HSA	th HSA \$498.55		\$1,371.01
PPO	\$605.38	\$1,241.03	\$1,664.80

2022 PEPM Medical Premium by Plan and Coverage Tier

Portion of Medical Premium Paid by ABC

Employee Selemy	Employee	Employee +	Employee +
Employee Salary	Only	Spouse	Family
Less than \$50K	80%	80%	80%
\$50K to \$75K	80%	75%	75%
\$75K to \$100K	80%	75%	75%
\$100K to \$150K	75%	65%	65%
\$150K or more	75%	65%	65%

ABC's Employee Census All Years

Plan	Coverage Tier	Salary Tier	Employee Count
PPO	Employee Only	Less than \$50K	1
PPO	Employee Only	\$50K to \$75K	1
PPO	Employee Only	\$150K or more	1
PPO	Employee + Spouse	\$50K to \$75K	2
PPO	Employee + Spouse	\$75K to \$100K	1
PPO	Employee + Family	Less than \$50K	1
РРО	Employee + Family	\$50K to \$75K	2
PPO	Employee + Family	\$75K to \$100K	2
PPO with HSA	Employee Only	Less than \$50K	3
PPO with HSA	Employee Only	\$50K to \$75K	2
PPO with HSA	Employee Only	\$75K to \$100K	7
PPO with HSA	Employee Only	\$100K to \$150K	1
PPO with HSA	Employee + Spouse	Less than \$50K	4
PPO with HSA	Employee + Spouse	\$50K to \$75K	3
PPO with HSA	Employee + Spouse	\$75K to \$100K	1
PPO with HSA	Employee + Family	\$150K or more	1

(c) (*3 points*) Calculate ABC's total monthly contribution to employees' premiums in 2022. Show your work.

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

Course GH 101 – Benefits and Pricing

Learning Objective 4: Employee Benefits

Plan Type	Employee Only	Employee + Spouse	Employee + Family
PPO with HSA	\$530.96	\$1,088.46	\$1,460.13
PPO	\$635.65	\$1,303.08	\$1,748.04

ABC has received the following 2023 PEPM renewal rates for its medical plan offerings:

You are examining benefit plan and contribution strategies for ABC in 2023. You are given the following scenarios:

- (i) ABC uses the same contribution strategy as 2022.
- (ii) ABC changes its contribution to 85% of the Employee-only premium for each plan, plus 50% of the additional premium for any dependent coverage.
- (iii) ABC moves to a defined contribution strategy, with a fixed contribution for all employees equal to 80% of the lowest premium plan type.
- (iv) ABC eliminates the PPO plan offering, and all employees enroll in the PPO with HSA.
- (d) (*3 points*) Calculate the percentage change in ABC's total contributions, compared to 2022, for each of the above scenarios. Show your work.

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

(e) (*1 point*) Recommend a 2023 medical benefit contribution strategy for ABC. Justify your response.

8. Spring 2023 RM #8d

Consumers to the Rescue? A Primer on HDHPs and HSAs

(3 points) You are the benefits manager for a small employer.

- (d) (*3 points*) Describe proposed legislative improvements for expanding HSAs in the following areas:
 - (i) Contributions to HSAs

ANSWER:

(ii) Major medical use of HSA funds

ANSWER:

(iii) Nonmajor medical use of HSA funds

9. Fall 2023 RM #3

GH101-104-25 – EE Benefits Strategy Consumers to the Rescue? A Primer on HDHPs and HSAs

(7 *points*) Two companies are merging. The parent company uses Carrier A to provide health insurance. The acquired company uses Carrier B to provide health insurance.

You are given the following:

Carrier	Plan Design	Subscriber Count	Claims Per Employee Per Month (PEPM)	Actuarial Value Without Account Funding	Cost of Care Adjustment to Parent Carrier
А	CDHP	6,300	\$765	79.0%	1.000
	with HSA				
Α	CDHP	5,750	\$694 excludes	77.0%	1.000
	with HRA		claims paid with		
			HRA		
В	PPO High	2,100	\$1,150	86.0%	0.980
В	PPO Core	6,300	\$709	77.0%	0.980

CDHP – Consumer Driven Health Plan

HSA – Health Savings Account

HRA – Health Reimbursement Account

PPO - Preferred Provider Organization

(a) (*3 points*) Calculate the claims PEPM if the parent company transitions all subscribers to Carrier A's CDHP with HSA, using simplified underwriting. Show your work.

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

(b) (*2 points*) Evaluate reasons for and against the parent company offering alternative plan design options besides only a CDHP with HSA.

You are given the following information for a different company:

Division	Full Time	Actuarial	Monthly	Number of
	Employees	Value	Contribution for	FTEs Covered
	(FTEs)		Single Coverage	
Х	26,000	79.0%	\$92	24,000
Y	600	75.0%	\$400, no employer	500
			subsidy	

- One of Division X's FTEs who was not offered coverage, enrolled in an Exchange plan and received a federal subsidy
- One of Division X's FTEs who was offered coverage, enrolled in an Exchange plan
- Six of Division Y's FTEs enrolled in Exchange plans and receive federal subsidies
 All six have household incomes of less than \$30,000 per year
- (c) (2 *points*) Assess whether each division is subject to penalties under the Employer Shared Responsibility rules included in the Patient Protection and Affordable Care Act. Justify your response.

10. Fall 2023 RM #6

A Practical Guide to Private Exchanges Consumers to the Rescue? A Primer on HDHPs and HSAs GH101-106-25 – Handbook of EE Ben.

(8 points)

(a) (2 *points*) Explain why a functional approach is needed when planning, designing, and administering employee benefits.

ANSWER:

(b) (*3 points*)

(i) Describe common attributes of private exchanges.

ANSWER:

(ii) Compare and contrast elements of public and private exchanges.

ANSWER:

(c) (*2 points*) Describe how high deductible health plan (HDHP) enrollees' behaviors are modified by membership in a HDHP.

Company ABC offers two HDHPs to its employees.

- Plan A has a monthly premium of \$200.
- Plan B has a monthly premium of \$400 with richer benefits than Plan A.

ABC wants to encourage greater employee enrollment in Plan A and is concerned about budget variations due to unexpected enrollment across plans.

- (d) (l point)
 - (i) Calculate the monthly employee payroll contribution for each of the following contribution approaches. Show your work.
 - 1. Defined benefit at 75% employer subsidy
 - 2. Defined contribution at \$150 employer subsidy

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

(ii) Recommend which contribution approach ABC should use. Justify your response.

11. Spring 2024 RM #3

Consumers to the Rescue? A Primer on HDHPs and HSAs

(9 points)

(a) (2 *points*) Write a response to each question and for each savings account by completing the following table:

Feature	Health Savings Account (HSA)	Health Reimbursement Arrangement (HRA)	Flexible Spending Account (FSA)
Who owns the account?			
Who can contribute?			
Are contributions tax- deductible?			
Are there contribution limits?			
Can the funds roll over to the next year?			
What distributions are tax-free?			
What distributions are not eligible?			
Is a High Deductible Health Plan (HDHP) required?			

(b) (2 points) Describe examples of consumer behavior for individuals enrolled in HDHPs.

ANSWER:

(c) (2 points) Describe factors that could make HDHPs more effective.

You are an employee at Company ABC. You will be electing family coverage and have the following plan options:

	PPO-HDHP	HMO-Major Med
Family Deductible	\$3,000	\$1,000
Coinsurance	30%	20%
Max Out of Pocket	\$6,000	\$1,500

You are expecting three claims to occur in the following order:

- Claim #1: Employee outpatient surgery with allowed cost of \$1,000
- Claim #2: Dependent pharmacy claim for Drug X with allowed cost of \$5,000
- Claim #3: Employee specialist visit with allowed cost of \$500
- (d) (*1 point*) Calculate the difference in total cost sharing between the two plans. Show your work.

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

You discover that you now have access to a manufacturer drug coupon for Drug X and only have to pay \$10 out of pocket per script. The value of the discount accrues towards the health plan cost sharing amount.

- (e) (2 points)
 - (i) Calculate the revised difference in total cost sharing between the two plans. Show your work.

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

(ii) Describe additional considerations in deciding which plan option to choose.

12. Spring 2024 RM #8

GH101-106-25 – Handbook of EE Ben.

(5 points)

(a) (*1 point*) Describe factors that impact the level of complexity of administering an employee benefits program.

ANSWER:

(b) (*1 point*) Identify constraints a benefits manager must consider in the design of employee benefit plans.

ANSWER:

(c) (2 points)

(i) Define vendor summits.

ANSWER:

(ii) Describe purposes of vendor summits.

ANSWER:

- (d) (l point)
 - (i) Define a Summary Plan Description (SPD)

ANSWER:

(ii) Describe components of an SPD.

13. Fall 2024 RM #1

GH101-103-25 - ER Cont. Strategies

(4 points) You are an employee benefits actuary.

a) (2 points) Describe strategy considerations related to payroll contributions.

b) (2 points) Contrast defined benefit and defined contribution approaches for an employee benefits program.

14. Fall 2024 RM #4

GH101-106-25 – Handbook of EE Ben.

(6 points)

- (a) (*l point*)
 - (i) Describe the functional approach in designing and evaluating employee benefits.

ANS	SWER:
(ii)	List the usefulness of the functional approach in designing and evaluating

(ii) List the usefulness of the functional approach in designing and evaluating employee benefits.

ANSWER:

Company ABC is a large, well-established employer in a mature industry and is considering the benefits offered to its employees. The company has not updated benefits since it was founded 15 years ago.

ABC's current approach is to measure its benefit offerings relative to those provided by growth companies and developing industrial firms.

(b) (*l point*) Evaluate ABC's current approach.

ANSWER:

(c) (*2 points*) Summarize how ABC would analyze their current employee benefits against the objectives and current criteria under the functional approach.

ANSWER:

(d) (2 points) Compare and contrast the compensation/service-oriented benefit philosophy and the benefit-or-needs-oriented philosophy.