GH DPC Model Solutions
Spring 2021

1. **Learning Objectives:**

1. The candidate will understand how to describe plan provisions typically offered under:
   - Group and Individual medical, dental and pharmacy plans.
   - Group and Individual long-term disability plans.
   - Group and Individual short-term disability plans.
   - Supplementary plans, like Medicare Supplement.
   - Group and Individual long-term care insurance.

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

Learning Outcomes:

(1a) Describe typical organizations offering these coverages.

(2c) Calculate and recommend assumptions.

(2d) Calculate and recommend a manual rate.

(2e) Identify critical metrics to evaluate actual vs. expected results.

(2f) Describe the product development process including risks and opportunities to be considered during the process.

Sources:

Group Insurance Ch. 7

Group Insurance Ch. 23

GHDP-105-17: Pricing Considerations for Drugs Covered under Pharmacy Benefit programs

Commentary on Question:

Commentary listed underneath question component.

1. Continued

Solution:

(a) Describe the duties of a pharmacy benefit manager.

Commentary on Question:
Candidates generally did well on this part of the question and received full credit for providing the items below along with a brief description of each.

The duties of a pharmacy benefit manager are as follows:

1. Administrative duties – Adjudicate claims per the plan document and make payments to providers
2. Member services – manage call center, issue insurance cards, and resolve member issues
3. Negotiator – negotiate rebates with manufacturers, negotiate discounts with pharmacies, and manage relationships with third party payers
4. Utilization management – implement utilization / clinical management programs, offer benefit feature incentives, manage drug adherence programs, and maintain/update formulary

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

Commentary on Question:
Most candidates received full credit for this question for listing the items below and providing a brief description. Candidates who did not provide a brief description for an item received partial credit.

The components of the pharmacy allowed amount are as follows:

1. Discounted ingredient cost – this is also known as the Average Wholesale Price (AWP) less discount. The cost of the prescription drug after negotiated discount.
2. Dispensing fee – the fee charge by a pharmacy to fill a pharmacy script.
3. Vaccine fee – the charge for administering vaccines.
4. Sales tax – the charge associated with the sales of a prescription drug. Only a few states require sales tax for the sale of prescription drugs.

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

Commentary on Question:
Candidates who listed the items below with a brief description received full credit. Some candidates provided a list of items not applicable to formulary management programs and received no credit.

1. Continued

Formulary management programs deployed by pharmacy benefit managers to impact a plan's expected cost and utilization include the following:

1. Prior authorization – requires approval from the pharmacy benefit manager (PBM) prior to filling a prescription. This is the most restrictive formulary management program and restricts the use of certain drugs.
2. Step therapy – requires a patient to try a lower cost drug (that is clinically or therapeutically equivalent) or a series of drugs before providing coverage for a specific drug. For example, patients diagnosed with hypertension may be required to try first-line drug therapies like diuretics or beta blockers prior to beginning treatment with newer, more expensive and often riskier medications like calcium channel blockers or ACE inhibitors.
3. Quantity limit – restricts the number of days supply or the number of units per day dispensed for a given prescription. This might be done as a safety measure, to avoid waste, or a savings measure. For example, some pain medications have a limit on the number of pills per day that can be dispensed to avoid overuse.

(d) Calculate the change in ABC's allowed cost per member per month (PMPM) from 2020 to 2022. Show your work.

Commentary on Question:
Candidates generally performed well on this question and received full credit. Some candidates made minor calculation errors and received partial credit (e.g., did not correctly calculate the PMPM using scripts / utilization information and allowed amount)

The calculations of the allowed amount in 2020 and 2022 are shown below.

2020

Drug	Scripts / 1,000	AWP	Discount	Dispensing Fee	Allowed / Script	Allowed PMPM
A	6,000	$50	80%	$2.00	$12.00	$6.00
B	7,200	$60	85%	$2.00	$11.00	$6.60
C	2,400	$250	60%	$2.00	$102.00	$20.40
D	1,800	$300	60%	$2.00	$122.00	$18.30
E	3,600	$400	40%	$2.00	$242.00	$72.60
F	36	$10,000	25%	$2.00	$7,502.00	$22.51
PMPM						**$146.41**

1. Continued

Scripts per 1000: information is given
AWP: information is given
Discount: information is given
Dispensing Fee: information is given
Allowed / Script = AWP * (1 – Discount) + (Dispensing Fee)
PMPM = sumproduct of (Scripts and Allowed) / 12,000

2022

Drug	Scripts / 1,000	AWP	Discount	Dispensing Fee	Allowed / Script	Allowed PMPM
A	6,000	$50	80%	$2.00	$12.00	$6.00
B	7,200	$60	90%	$2.00	$8.00	$4.80
C	2,400	$250	65%	$2.00	$89.50	$17.90
D	1,800	$300	65%	$2.00	$107.00	$16.05
E	3,600	$400	35%	$2.00	$262.00	$78.60
F	36	$10,000	25%	$2.00	$7,502.00	$22.51
PMPM						**$145.86**

Change in PMPM = $145.86 - $146.41 = ($0.55)
PMPM decreased by $0.55

The allowed amount calculated without the dispensing fee also resulted in a decrease in the PMPM of $0.55 – candidates also received full credit for this calculation.

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

Commentary on Question:
Many candidates made minor calculation errors and did not receive full credit for this part. There was a change in formulary / tiering (i.e. a difference in the copay amount between the current formulary and the new formulary); many candidates calculated the change in the PMPM cost that is only reflective of the introduction of the rebates and not the change in formulary tiering.

1. Continued

2022 Current Formulary

Drug	Tier	Scripts	Allowed	Rebates	Copay	Plan Cost
A	1	6,000	$12.00	$0.00	$5.00	$7.00
B	1	7,200	$8.00	$0.00	$5.00	$3.00
C	2	2,400	$89.50	$0.00	$25.00	$64.50
D	3	1,800	$107.00	$0.00	$50.00	$57.00
E	3	3,600	$262.00	$0.00	$50.00	$212.00
F	4	36	$7,502.00	$0.00	$2,250.60	$5,251.40
	Plan Paid PMPM					**$106.10**

Allowed: Calculated in part d)
Rebates: Information is given
Copay: Information is given; for Drug F, copay = Allowed * 30% coinsurance
Plan Cost = Allowed Amount – Rebates – Copay

Plan Paid PMPM = sumproduct of (Scripts and Plan Cost) / 12,000

2022 New Formulary

Drug	Tier	Scripts	Allowed	Rebates	Copay	Plan Cost
A	1	6,000	$12.00	$0.00	$5.00	$7.00
B	1	7,200	$8.00	$0.00	$5.00	$3.00
C	2	2,400	$89.50	$25.00	$25.00	$39.50
D	2	1,800	$107.00	$25.00	$25.00	$57.00
E	2	3,600	$262.00	$25.00	$25.00	$212.00
F	4	36	$7,502.00	$0.00	$2,250.60	$5,251.40
	Plan Paid PMPM					**$101.10**

Change in PMPM = $101.10 - $106.10 = ($5.00)
PMPM decreased by $5.00

Candidates who calculated the difference in PMPM between 2020 formulary vs. 2022 new formulary and arrived at a decrease of $5.55 in PMPM also received full credit for this question.

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

1. Continued

Commentary on Question:
Candidates performed well on this part; most candidates provided a subset of the items below with justification and received full credit.

The following actions (along with justification) can be pursued by ABC to further reduce its costs.

1. Formulary – modify the formulary list to favor drugs with a lower cost for a comparable clinical efficacy
2. Rebates / discounts – renegotiate for higher rebates /discounts for drugs on the formulary list.
3. Drug tiers – place lower cost, therapeutically equivalent drugs at lower tiers
4. Formulary management / utilization management – implement programs such as step therapy (mandate use of lower cost drugs first), prior authorization (require clinical review/approval for use of drug), and quantity limits (limit the quantity dispensed to reduce waste)
5. Exclusion – do not cover certain drugs on the plan
6. Cost share – increase cost share and shift cost to members (e.g., higher deductible, copays, and coinsurance)
7. Mail order – incent members to use mail order especially for maintenance medication

2. Learning Objectives:

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

Learning Outcomes:

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

(2c) Calculate and recommend assumptions.

(2d) Calculate and recommend a manual rate.

(2f) Describe the product development process including risks and opportunities to be considered during the process.

Sources:

Group Insurance – Ch. 20-21

Essentials of Managed Health Care – Ch. 22

Commentary on Question:

Commentary listed underneath each question component.

Solution:

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

Commentary on Question:

Candidate performance was mixed on part (a). Most candidates listed information gathered during underwriting and items taken into consideration for rating.

Adequate – Rates are high enough to generate sufficient revenue to cover all claims and other plan expenses and to yield an acceptable return on equity.

Competitive – Rates are low enough to sell enough policies and enroll enough members to meet health plan volume and growth targets.

Equitable – Rates will approximate any given group's costs without an unreasonable amount of cross-subsidization among groups. Equitable rates are achieved through applying various rating factors appropriately and result in higher persistency.

2. Continued

(b) (i) Critique the rate calculation.

Commentary on Question:
Many candidates critiqued what was missing from the rate calculation without critiquing the listed components of the rate calculation.

Manual Rate – The starting rate of $399.50 is a PMPM rate for PPO500 (from case study). This rate does not align with the given tier structure (EE only / EE + Family). Recommend converting manual rate into two-tier structure. The rate also needs to be adjusted for the effective date of the policy and the fact that the policy being quoted is for 18 months vs. the typical 12-month period.

Final Rate – The final rate needs to incorporate non-claim expenses and should be rounded to two decimal places.

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

Commentary on Question:
Most candidates did well on part (b)(ii). Credit was given for reasonable answers not included in the model solution.

Retention – Add expense load since one was not included in the calculation.

Actual Experience – Company XYZ has 500 enrolled employees. A group this size is large enough to include their actual experience in the calculation.

Geographic/Area Factor – Add area factor to the calculation since one was not included in the calculation.

Trend – A trend factor should be included to account for the 18-month policy period.

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

Commentary on Question:
Most candidates received partial credit on part (c) as they listed data elements needed but did not justify inclusion of the data elements. Credit was given for reasonable answers not included in the model solution.

Monthly Medical/Rx Claims & Enrollment – This information will be used to determine trend for PMPM claims and the level of historical claims.

2. Continued

Large Claim Report – This information will be used to determine if a pooling adjustment is necessary.

Plan Designs – Historical and current plan designs will be used to adjust historical experience to the current plan design.

Historical Claim Lag Triangles – This information will be used to create completion factors which will be applied to paid claim amounts.

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

Commentary on Question: *Most candidates received partial credit on part (d) for providing adjustments without justification. Credit was given for reasonable answers not included in the model solution.*

The rate calculation should:

- Switch from community-rated to experience-rated.
- Credibility weight claims with manual rate.
- Adjust claims to align with proposed plan design.

These adjustments will ensure the premium for XYZ more closely mirrors XYZ's experience and expected level of claims and allow Royale Health to have a more competitive offering in this market.

3. Learning Objectives:

1. The candidate will understand how to describe plan provisions typically offered under:
   - Group and Individual medical, dental and pharmacy plans.
   - Group and Individual long-term disability plans.
   - Group and Individual short-term disability plans.
   - Group and Individual long-term care insurance.
   - Group life insurance plans.
   - Supplementary plans, like Medicare Supplement.

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

Learning Outcomes:

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

(1c) Evaluate the potential moral hazard and financial and legal risks associated with each coverage.

(2e) Identify critical metrics to evaluate actual vs. expected results.

(2f) Describe the product development process including risks and opportunities to be considered during the process.

(2g) Apply actuarial standard of practice in evaluating and projecting claim data.

Sources:

Group Insurance, Ch. 26

Mechanics and Basics of Long-Term Care Rate Increases, Long-Term Care News, Aug 2014

Combination Products: An Accelerated Education, Product Matters, Jul 2019

ASOP 18: Long-Term Care Insurance

ASOP 23: Data Quality

ASOP 25: Credibility Procedures

ASOP 41: Actuarial Communications

Commentary on Question:

Commentary listed underneath question component.

3. Continued

Solution:

(a) Calculate for policy numbers 9 and 10 using a 5-year projection period, the:

(i) Present value of future earned premium

(ii) Present value of future incurred claims

(iii) Loss ratio

Show your work. State your assumptions.

Commentary on Question:
This question tested candidates' understanding of LTC assumptions and projection methods. Full credit was given for correctly developing persistency and interest factors, applying them to premiums and claims, and calculating the loss ratios. Partial credit was given for correctly calculating the various components of the calculation of PV premium and PV claims. Many candidates did well on this question, but few received full credit due to calculation errors at various stages.

Policy 9
Gender: Female
Issue Age: 52
Issue Year: 2001
Benefit Level: 2
Annualized Premium: $2,144.93
Daily Benefit: 120

A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*
						Cumulative Persistency		
Projection Year	Calendar Year	Attained Age	Lapse Rate	Mortality Rate	Annual Persistency	Beginning of Year	Mid Year	End of Year
1	2021	72	0.010	0.012	0.978	1.000	0.978	0.978
2	2022	73	0.010	0.012	0.978	0.978	0.957	0.957
3	2023	74	0.010	0.012	0.978	0.957	0.936	0.936
4	2024	75	0.010	0.020	0.970	0.936	0.908	0.908
5	2025	76	0.010	0.020	0.970	0.908	0.881	0.881

J	*K*	*L*	*M*	*N*	*O*
Projection	Annualized	Cumulative Mid-Year	Earned	Mid-Year Interest	Discounted Earned

Year	Premium	Persistency	Premium	Discount	Premium
1	2,144.93	0.978	2,098.00	0.983	2,062.22
2	2,144.93	0.957	2,052.09	0.950	1,948.89
3	2,144.93	0.936	2,007.19	0.918	1,841.78
4	2,144.93	0.908	1,947.38	0.887	1,726.47
5	2,144.93	0.881	1,889.35	0.857	1,618.38
				#9 Earned Premium (Sum of above) =	9,197.74

(i)

P	*Q*	*R*	*S*	*T*	*U*	*V*
Projection Year	Claim Cost Per $100	Claim Cost Per $120	Cumulative Mid-Year Persistency	Paid Claims	Mid-Year Interest Discount	Discounted Paid Claims
1	553.63	664.36	0.978	649.82	0.983	638.74
2	664.35	797.22	0.957	762.72	0.950	724.36
3	830.44	996.53	0.936	932.54	0.918	855.69
4	1,079.56	1,295.47	0.908	1,176.16	0.887	1,042.74
5	1,399.12	1,678.94	0.881	1,478.89	0.857	1,266.79
					#9 Incurred Claims (Sum of above) =	4,528.30

(ii)

#9 Loss Ratio (ii / i) = 49.2% (iii)

Policy 10
Gender: Male
Issue Age: 45
Issue Year: 2002
Benefit Level: 3
Annualized Premium: $1,513.92
Daily Benefit: 180

A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*
						Cumulative Persistency		
Projection Year	Calendar Year	Attained Age	Lapse Rate	Mortality Rate	Annual Persistency	Beginning of Year	Mid Year	End of Year
1	2021	64	0.010	0.007	0.983	1.000	0.983	0.983
2	2022	65	0.010	0.010	0.980	0.983	0.964	0.964
3	2023	66	0.010	0.010	0.980	0.964	0.944	0.944
4	2024	67	0.010	0.010	0.980	0.944	0.926	0.926
5	2025	68	0.010	0.010	0.980	0.926	0.907	0.907

J	*K*	*L*	*M*	*N*	*O*
Projection Year	Annualized Premium	Cumulative Mid-Year Persistency	Earned Premium	Mid-Year Interest Discount	Discounted Earned Premium
1	1,513.92	0.983	1,488.29	0.983	1,462.91
2	1,513.92	0.964	1,458.67	0.950	1,385.31
3	1,513.92	0.944	1,429.64	0.918	1,311.83
4	1,513.92	0.926	1,401.19	0.887	1,242.25
5	1,513.92	0.907	1,373.31	0.857	1,176.35
			#10 Earned Premium (Sum of above) =		6,578.65

(i)

P	*Q*	*R*	*S*	*T*	*U*	*V*
Projection Year	Claim Cost Per $100	Claim Cost Per $180	Cumulative Mid-Year Persistency	Paid Claims	Mid-Year Interest Discount	Discounted Paid Claims
1	347.46	625.43	0.983	614.84	0.983	604.35
2	356.02	640.84	0.964	617.45	0.950	586.40
3	409.43	736.97	0.944	695.95	0.918	638.60
4	473.12	851.62	0.926	788.21	0.887	698.79
5	591.42	1,064.56	0.907	965.68	0.857	827.19
				#10 Incurred Claims (Sum of above) =		3,355.33

(ii)

#10 Loss Ratio (ii / i) = 51.0% (iii)

Column Definitions

A From question
B From question
C = B - [Issue Year] + [Issue Age]
D From question
E From question
F = (1 - D) * (1 - E)
G = I for prior projection year (1.0 in year 1)
H = G * F
I = H
J From question
K From question
L = I
M = K * L
N = (1 + 3.50%) ^ -(J - 0.5)
O = M * N
P From question

Q From case study Exhibit 5
R = Q * [Daily Benefit] / 100
S = I
T = R * S
U = (1 + 3.50%) ^ -(P - 0.5)
V = T * U

Additional Assumptions

- Lapses and deaths occur prior to premium and claims. All occur at mid-year.

(b) Identify Actuarial Standards of Practice to be considered when projecting and communicating the loss ratio to Thunderball management.

Commentary on Question:
Candidates only needed to list the applicable ASOPs. Full credit was given for listing ASOP 18, ASOP 41, and at least one other applicable ASOP. Many candidates provided descriptions of various ASOPs, in addition to listing them. Generally, candidates did well on this part.

ASOP 18: Long-Term Care Insurance
ASOP 23: Data Quality
ASOP 25: Credibility Procedures
ASOP 41: Actuarial Communication

(c) Describe steps that should be taken to evaluate the financial condition of Thunderball's LTC business.

Commentary on Question:
This part tested candidates' ability to synthesize material from multiple sources covering repricing and general best practices. Many candidates noted reviewing assumptions or evaluating loss ratios.

1. Summarize historical experience, including policy counts, earned premium, and incurred claims.
2. Analyze historical experience to evaluate assumptions. Morbidity, lapse, and mortality assumptions should be reviewed to confirm they are still appropriate and adjusted if needed.
3. Prepare lifetime projections of the business by combining historical experience with projected future experience.
4. Compare projected lifetime experience, including loss ratios, to pricing expectation and regulatory requirements.

3. Continued

(d) Evaluate Thunderball's assertion. Justify your response.

Commentary on Question:
This part tested candidates' understanding of the interaction between LTC premium and claim levels over the life of a policy. Full credit was given if candidates stated an evaluation and provided an appropriate justification. Many candidates described the rate increase justification required as part of the 58/85 test in Rate Stability regulation, for which full credit was also given.

Thunderball's management is incorrect. It is not appropriate to compare a projected future loss ratio with a pricing lifetime loss ratio for LTC business. LTC policies are priced with level premiums, but claims are lower at younger ages and higher at older ages. In early durations, excess premiums are collected and used to prefund claims in later durations.

(e)

(i) Compare and contrast the premium and benefit structures of:
- stand-alone LTC products
- the LTC portion of life and LTC combination products

(ii) Describe characteristics of LTC combination products that incentivize a consumer to purchase a combination product over a stand-alone LTC product.

Commentary on Question:
Part (i) tested candidates' understanding of the LTC benefit and premium structures of both stand-alone and combination products. Candidates were expected to provide both similarities and differences. Many candidates provided only differences. Full credit was given if at least one similarity and one difference were described for both premium and claims. Many candidates commented on the premium for the LTC portion of the combo product being lower than the premium for standalone LTC, but did not include commentary on the premium structure.

Part (ii) tested candidates' understanding of the history of stand-alone policies and the development of combination products. Full credit was given for candidates who identified at least two incentives for consumers to purchase a combination product. Many candidates correctly noted the "use it or lose it" nature of stand-alone LTC products.

3. Continued

(i) Premiums. Premiums for stand-alone LTC policies are generally guaranteed renewable and priced to be level. As long as the policyholder pays the premium, the policy cannot be cancelled. However, there have been a lot of rate increases in the past. In combo policies, the premiums for LTC benefits can be an explicit additional premium (explicit premium method), they could be included as a charge in the discounting of an accelerated benefit (actuarial present value method), or they could be funded with a lien against the policy (lien method). Many combination products are sold as single-premium policies, which avoids rate increases for the consumer.

Benefits. Benefits for stand-alone policies can be indemnity or reimbursement and defined as either a time period or a pool of money. Benefit eligibility is generally based on ADL deficiencies or cognitive impairment and payments are made after the elimination period. LTC benefits for combination policies can also be indemnity or reimbursement and are usually defined as a pool of money. The LTC benefits may be an acceleration of the death benefit or an extension of additional benefits beyond the death benefit. Benefit eligibility triggers are often more diverse than for stand-alone LTC and could include terminal illness as a qualifying event.

(ii) Stand-alone LTC policies have a history of rate increases, even though they were priced as level premium products. The rate guarantees of combination products generally do not allow for rate increases and many are sold as single premium policies. This eliminates the possibility of a rate increase.

Stand-alone LTC policies also have a "use it or lose it" nature in that consumers can pay premiums for years and receive nothing in return if they do not receive qualifying LTC services. Combination policies pay a benefit upon death or the need for LTC services, so consumers receive a benefit no matter what.

Consumers may also need both life/annuity coverage and LTC coverage. Combination products can meet both of these needs in a single policy.

4. Learning Objectives:

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

Learning Outcomes:

(3a) Describe structure of employee benefit plans and products offered and the rationale for offering these structures.

(3b) Describe elements of flexible benefit design and management.

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

Sources:
GHDP-106-16: Health Plan Payroll Contribution Strategies and Development for Employers

Commentary on Question:
Commentary listed underneath question component.

Solution:

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

Commentary on Question:
Most candidates knew the difference between defined benefit and defined contribution.

- "Defined Benefit": Employee's contribution is either a specified percentage of premium or some other amount determined by the employer.
- "Defined contribution": employer provides a defined dollar subsidy regardless of plan choice.
- Defined contribution approach produces equal employer subsidy across employees, insulating employer from budget variation occurring due to unexpected enrollment across the plans.
- Defined contribution approach reduces a bigger percentage of premium for leaner plans. It results in greater enrollment in leaner plans when compared to defined benefit.

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

Commentary on Question:
Candidates who knew the source material generally did well on this part. Some only listed considerations without including descriptions that were needed for full credit.

4. Continued

a) Total compensation philosophy.
Employer (ER) needs to consider how compensation is divided between salary and benefits and what types of benefit are offered.
b) Benefit budget
ERs are often faced with benefits budgets that do not keep pace with increase in cost of healthcare.
c) Benefit competitiveness
ER needs to consider total benefit structure compared to their competitors with whom they compete for talent. The benefit levels and employee (EE) contribution may vary by region, job class, ER size, industry and between EE vs dependent coverage.
d) Collective Bargaining
Union groups that have collective bargaining may have better health coverage and subsidization than non-union groups at the same company.
e) Legislative and Regulatory Issues
The impact of Legislation and/or regulation can influence payroll contribution level. Under ACA, ER with more than 50 EEs will have to provide "affordable" coverage.

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

Commentary on Question:
Candidates needed to list both advantages and disadvantages for full credit.

Advantages:
- Balance program cost and continue to provide meaningful and equitable coverage to employees
- Align compensation among employees regardless of marital status

Disadvantages:
- Negative impacts on employee relations
- Potential for anti-selection as healthier dependents/spouses drop off the plan with many employers opting to subsidize dependents less, employers that do not follow the same approach risk becoming "employer of choice" for dependents and may experience a greater percentage of employees enrolling their dependents on their plans

4. Continued

(d) 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.

Commentary on Question:
Candidates generally did well on the calculation portion and were able to successfully calculate the change in premium contribution.

Sex	Age	# of Employees	Annual Salary	Family Composition	Premium	Defined Contribution Premium	Defined Benefit Premium	DB-DC	Income Based Contribution Premium		IBC-DC
					From Case Study	Premium - 170	Premium * (1-22%)	Difference	Based on Salary	Premium * (1-prior column)	Difference
F	<25	0	N/A								
F	25-29	2	$28,500	Single	$351	$181	$274	$93	25.0%	$263	$82.25
F	30-34	5	$33,000	EE + Spouse	$705	$535	$550	$15	25.0%	$529	($6.25)
F	35-39	7	$37,500	Family	$857	$687	$668	($19)	22.5%	$664	($22.82)
F	40-44	3	$48,400	Family	$857	$687	$668	($19)	22.5%	$664	($22.82)
F	45-49	2	$55,900	Family	$857	$687	$668	($19)	20.0%	$686	($1.40)
F	50-54	1	$66,700	Family	$857	$687	$668	($19)	20.0%	$686	($1.40)
F	55-59	1	$79,300	EE + Spouse	$705	$535	$550	$15	20.0%	$564	$29.00
F	60-64	1	$91,700	EE + Spouse	$705	$535	$550	$15	17.5%	$582	$46.63
M	<25	1	$22,000	Single	$351	$181	$274	$93	25.0%	$263	$82.25
M	25-29	0	N/A								
M	30-34	5	$33,000	EE + Spouse	$705	$535	$550	$15	25.0%	$529	($6.25)
M	35-39	6	$37,000	Family	$857	$687	$668	($19)	22.5%	$664	($22.82)
M	40-44	6	$46,750	Family	$857	$687	$668	($19)	22.5%	$664	($22.82)
M	45-49	1	$55,400	Family	$857	$687	$668	($19)	20.0%	$686	($1.40)
M	50-54	2	$67,600	Family	$857	$687	$668	($19)	20.0%	$686	($1.40)
M	55-59	1	$78,250	EE + Spouse	$705	$535	$550	$15	20.0%	$564	$29.00
M	60-64	1	$90,500	EE + Spouse	$705	$535	$550	$15	17.5%	$582	$46.63
	Total	45			$775.98	$605.98	$605.26	**($0.72)**		$602.09	**($3.89)**

Dr. No's monthly contribution is reduced by $0.72 per employee with Option (i) and $3.89 per employee with Option (ii).

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

Commentary on Question:
Many candidates did not critique the specific strategy outlined in the prior section. Credit was given for reasonable answers not included in the model solution.

4. Continued

- Income based contribution varies contribution by income level, producing a more equitable distribution of cost across employees.
- Income based contribution could significantly increase contribution for employees in the upper income band when first implemented.
- It could create a "cliff" in contribution for EE moving from one band to another.
- EE in lower income bands may experience a significant increase in contribution as they are brought to a single average level.
- It is administratively complex and difficult to unwind should an employer want to revert back to a single salary band.

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

Commentary on Question:
Candidates did well in recommending a strategy, though the level of justification varied.

I recommend Dr. No Herbal Tea to maintain the current Defined contribution approach.
From the calculation in part d, we see that in both Defined benefit and income-based contribution scenarios, single employees are "punished" with a large increase in premium, of $93 and $82 respectively.
The single employees have the lowest salaries, so the large increase in premium impacts them more significantly than those at higher salary levels.

5. Learning Objectives:

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

Learning Outcomes:

(3a) Describe structure of employee benefit plans and products offered and the rationale for offering these structures.

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

Sources:

The Handbook of Employee Benefits, Chs. 2, 25, 32

Commentary on Question:

This question tests the candidate's knowledge of the functional approach to designing a benefit plan. Candidates then apply that knowledge to a CEO's desire to offer a rich benefit plan to a recently formed small group of young employees – both in commenting on the CEO's recommendations and proposing a benefit more suited to his new company. Most candidates did very well when providing the lists that answered parts (a) – (c) yet struggled to give thorough answers with appropriate justification in parts (d) and (e).

Solution:

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

Commentary on Question:

Most candidates performed well on this part.

1. Classify employee (and dependent) needs
2. Classify the categories of persons (e.g., employees, some former employees, and dependents)
3. Analyze the benefits presently available
4. Determine any gaps in benefits or overlapping benefits
5. Consider recommendations for changes in the employer's present employee benefit plan to meet any gaps
6. Estimate the costs or savings from each of the recommendations
7. Evaluate alternative methods of financing or securing the benefits
8. Consider other cost-saving techniques in connection with the recommended or existing benefits
9. Decide upon appropriate benefits, methods of financing, and sources of benefits
10. Implement the changes
11. Communicate benefit changes to employees
12. Periodically reevaluate the employee benefit plan.

5. Continued

(b) Describe special considerations for small companies when implementing medical insurance benefits.

Commentary on Question:
Most candidates were able to describe some considerations specific to small companies.

1. Most often fully-insured, subject to state mandated benefit restrictions
2. Because they operate in a limited geographic area, may have a limited number of carrier options, including regional carriers who could have more restrictive networks than national carriers / Plan offerings may be restricted based on the available local networks
3. Small companies may have to provide additional documentation to verify the existence of an actual company, and not just a banding together of people solely for the purpose of obtaining insurance
4. Most states do not allow companies and organizations to join forces to form larger purchasing pools in order to get group discounts

(c) Explain reasons why a small employer may choose to not implement a traditional cafeteria plan.

Commentary on Question:
Most candidates recognized the additional administrative costs and the difficulty in dealing with anti-selection when implementing a traditional cafeteria plan. Many candidates did not comment on requirements for non-discrimination testing. Credit was given for reasonable answers not included in the model solution.

1. Large cost of administration to operate a cafeteria plan.
2. Adverse selection results in increased costs
3. Plans are subject to complex coverage and non-discrimination testing.

In essence, cafeteria plans pose excessive challenges/costs considering the size of the small employer, and the benefit-eligible employees of a small employer tend to not have the range/extent of differences in individual circumstances/needs to justify the complexity of a cafeteria plan.

(d) Critique the CEO's position on benefits.

5. Continued

Commentary on Question:
Many candidates failed to discuss how different the small employer group would be compared with the CEO's previous company: the expectations of a younger and healthier population as opposed to the population in a well-established, larger employer group. Most candidates provided the list of issues with a non-contributory plan.

1. A young employee population is generally healthier, and may not find a Rich PPO valuable (other benefits, including higher salaries, could be more attractive to this employee population)
2. Employees may prefer a cafeteria plan where they can use credits to purchase more personally valuable benefits
3. Employees may prefer a CDHP with a large employer contribution
4. Noncontributory plans can cause issues long-term such as:
   a. Creating an entitlement or expectation of coverage. This would create problems if a contribution is later introduced
   b. Most employers charge some sort of contribution for coverage, so employees may expect to have a cost
   c. Contributions can drive employees to cover dependents or themselves on other plans, lowering plan costs. If there is no contribution, employees will enroll even if they don't need coverage
   d. Can create a legal liability if someone declines noncontributory coverage, goes to a provider and the provider holds the employer liable

(e) Propose an alternative benefit strategy to the CEO. Justify your response.

Commentary on Question:
Most candidates provided a recommendation to the CEO, although responses generally did not provide enough justification or incorporate specifics from the question in the response to earn full credit. Credit was given for reasonable answers not included in the model solution.

1. Provide a CDHP/HDHP which will promote consumerism
2. Require some level of contribution on the part of the employee
3. Use savings from offering the HDHP to fund an HSA
4. Use savings to offer higher pay/bonuses

5. Taking these steps will provide a more-compelling pay & benefits package to the company's workforce and will help position the company to avoid anti-selection or setting an expectation that it will continue to fully subsidize health insurance in the future.