GH RM Model Solutions
Spring 2025

1. **Learning Objectives:**

3. The candidate will understand how to evaluate healthcare intervention programs.

Learning Outcomes:

(3a) Describe, compare and evaluate programs.

Sources:

Managing and Evaluating Healthcare Intervention Programs, Duncan, Ian G., 2nd Edition, 2014

- Ch. 9: Applying the Economic Model: The Example of Opportunity Analysis
- Ch. 12: An Actuarial Method for Evaluating Care Management Outcomes (excluding Appendix 12.2-12.3)

Commentary on Question:

Commentary listed underneath question component.

Solution:

(a) Describe the three models of care management program planning, including advantages and disadvantages that may favor one model over another model.

Model 1

- Predictive model that stratifies members according to their predictive risk score
- Drawback is prevalence of those members at the top of the list are minimally intervenable, and therefore represent a low opportunity

- list of members will consist of a mix of patients with different conditions, issues and needs, which may create operational issues if the population is very diverse. This diversity leads some program sponsors to favor Model 2.

Model 2

- condition specific model
- Case management program sponsors frequently want to focus on members with a specific disease (e.g., diabetes) to simplify program design and execution

1. Continued

- Drawback is the high prevalence of co-morbidities in the high-risk population means that any program targeted at a specific condition will ultimately need to address all conditions of the population.
- Another drawback is a focus on one disease may miss the greater (financial) opportunity

Model 3

- Rules-based approach/model
- Often used in case management programs
- Program managers determine the set of rules, which are often based on prior experience, that are designed to identify target patients.
- Sometimes the rules are condition-specific; sometimes a financial threshold is used (e.g., $50K in claims).
- The members targeted may or may not represent a high opportunity. For example, patients who exceed $50K threshold have high likelihood of regressing to the mean (i.e., don't represent a high opportunity).
- Rules-based interventions rely on clinicians for identification of candidates, and there is evidence that clinicians are not particularly good identifying candidates.

(b) Describe ways the actuarially-adjusted historical control methodology addresses the challenges found in other types of care management evaluations.

- Measurement period and baseline period need not be continuous/adjacent.
- There may be some overlap between the populations (i.e., the same members will be identified in both the baseline and measurement periods) as long as the overlap is not complete.
- Two populations in two periods, identified according to the same criteria, rather than a cohort study of following the same population in the baseline period through the intervention period.
- Equivalence between the two periods is assumed from the symmetrical treatment of members in each period/applying exactly the same rules for population selection in each period.
- Savings are not directly measurable. Instead, they are derived as the difference between an estimated statistic and the actual statistic from the measurement period.
- Savings are measured in cost of admission, net paid claims, emergency room visits or any relevant measure of utilization
- Applicable trend is derived from comparable, non-chronic member experience

1. Continued

(c) Describe differences between managed and measured populations for disease management programs.

- The population to be measured need not be the same population being managed
- A disease management program may be offered to all chronic members of a health plan. Some of these members may not be good candidates for management (e.g., institutionalized members, terminal disease members)
- The program may be offered to members who self-identify with a chronic disease, even when they are not identified as having the disease.

(d) Describe the following terms used for care management evaluation:

(i) Exposure to risk

- Exposure has two meanings:
  - A patient is "exposed" to an intervention by being a member of a group selected for intervention or a program.
  - For measurement or actuarial calculations, "exposure" has a meaning synonymous with "denominator," and refers to the entire group eligible for an intervention, or included in a study
- The risk-unit is often the member month, and the total "exposure to risk" is the total number of member months measured between the start and end dates of the study.
- Defining and controlling the "exposure" as one of the most critical components of a study.

(ii) Intent to treat

- Is one way to avoid bias in studies
- Usually applied to randomized trials, but it has applicability also in non-randomized studies
- Analysis includes every subject and ignores noncompliance, protocol deviations and withdrawal of participants
- Generally results in more conservative estimates of treatment effects than studies that focus on participants only

2. Learning Objectives:

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

Learning Outcomes:

(1a) Describe structure of employee benefit plans and products offered and the rationale for offering these structures.

(1b) Describe elements of flexible benefit design and management.

Sources:

GHRM-101-23: Health Plan Payroll Contribution Strategies and Development for Employers

Commentary on Question:

Candidates were provided an opportunity to apply various common health plan contribution strategies for establishing monthly premium cost sharing between employers and employees and then identify and evaluate impacts from these potential strategies.

Solution:

(a) Calculate YKW's total monthly contribution to employee's medical premiums in Year X. Show your work.

See Excel for the solution for this part of the question.

(b) Calculate the percentage increase in YKW's total contributions in Year X+1 compared to Year X for the following scenarios. Show your work.

(i) YKW keeps the same contribution strategy as Year X.

(ii) YKW adopts a defined contribution strategy, with a fixed contribution of 80% of PPO premium by coverage tier.

(iii) YKW changes its contribution level to 85% of employee-only medical premium, plus 50% of additional premium for dependent coverage.

(iv) YKW sets monthly employee contributions as a percentage of annual salary as follows:

Plan	Employee only	Employee plus spouse	Employee plus family
HMO	0.240%	0.504%	0.672%
PPO	0.200%	0.420%	0.560%

See Excel for the solution for this part of the question.

2. Continued

(c) Recommend a medical benefit contribution strategy to YKW for Year X+1. Justify your response.

Commentary on Question:
Candidates who performed well on this part of the question provided a clear recommendation that was supported with rationale and caveats of potential impacts to both the employer (YKW) and the employees.

Examples of recommendations with rationale and caveats:

- Scenario (i) – although a 6.3% total increase to YKW, employees would receive similar increases in payroll deduction, so would appear equitable; keeping existing strategy wouldn't require development of new employee communication, nor changes to existing payroll administration

- Scenario (ii) provides a lower YKW increase (5.6%), but this defined contribution would shift costs unevenly or effectively reduce plan employee choice, which could introduce lower employee morale or turnover; however, this would steer employees towards a lower cost plan and provide additional savings for YKW.

- Scenario (iii) lowers YKW contribution than existing Year X levels (-1.3%), but employees will bear more cost of dependent coverage, particularly those who are lower salaried

- Scenario (iv) provides lower increase (4.1%) to YKW than (i); setting employee contribution percentages as a percentage of payroll is more transparent to employees and would synch future increases with salary

3. Learning Objectives:

2. The candidate will understand how to evaluate the effectiveness of different provider reimbursement methods from both a cost and quality point of view.

Learning Outcomes:

(2b) Evaluate standard contracting methods from a cost-effective & quality perspective.

(2c) Understand contracts between providers and insurers.

Sources:

Chapter 45 of Group Insurance, Skwire, Daniel, 8th Edition, 2021

Surprises in the No Surprises Act: An Interview with Greg Fann, Health Watch, Sep 2024

Surprises in the No Surprises Act: An Interview with Greg Fann Part 2, Health Watch, Nov 2024

Commentary on Question:

Commentary listed underneath question component.

Solution:

(a) Describe strengths and weaknesses of the No Surprises Act (NSA).

Commentary on Question:

Most candidates performed well on this part of the question.

Strengths:

- **Standardized Arbitration Process:** The NSA establishes an independent dispute resolution (IDR) process to resolve payment disputes between insurers and out-of-network providers, potentially reducing the burden on patients.
- **Protection from Surprise Billing**: The NSA prevents patients from receiving surprise medical bills for emergency services, non-emergency services provided by out-of-network providers at in-network facilities, and air ambulance services.
- **Patient Financial Responsibility**: Patients are only responsible for in-network cost-sharing amounts for out-of-network emergency care, preventing unexpected high costs.
- **Improved Patient Experience**: By reducing the financial stress associated with unexpected medical bills, the NSA aims to improve the overall patient experience.
- **Cost Transparency**: The act requires healthcare providers to give patients clear and advance notice if they will be treated by an out-of-network provider, along with an estimate of the potential costs.

3. Continued

Weaknesses:

- **Limited Scope**: While the NSA covers many scenarios, it does not address all situations where surprise billing can occur, such as ground ambulance services.
- **Insurer-Provider Disputes**: The dispute resolution process may lead to prolonged negotiations between insurers and providers, potentially delaying payment resolutions. Higher than expected volumes (14x) may cause a backlog and further exacerbate the delay.
- **Unintended Consequences**: There is a risk that some providers may adjust their billing practices or network participation in response to the NSA, which could have unintended effects on healthcare costs and access.
- **Implementation Challenges**: The NSA requires significant coordination and compliance efforts from healthcare providers, insurers, and facilities, which can be challenging to implement effectively.
- **Potential for Increased Administrative Costs**: The IDR process and other compliance requirements may lead to increased administrative costs for providers and insurers, which could be passed on to consumers.

(b) Explain why both the average claim payment amount and number of paid claims related to NSA services might decrease.

Commentary on Question:
The most common mistake by candidates was failing to explain why both the average claim payment amount and number of paid claims would decrease. The question was specific to NSA services, so responses should be specific to NSA services.

Paid Claim Volume:

- Arbitration has resulted in a backlog of claims delaying claim payments.
- Providers may come to an agreement before the arbitration process is reached, leading to both lower paid amounts and fewer claims.
- As providers move in-network, there will be less OON claims utilizing NSA services.
- Patients may seek fewer OON services because of education.

Average Claim Amount:

- For claims that go through NSA services, QPA may be lower than previous billed claim amounts. IDR may also drive paid amounts lower than previous billed claim amounts.
- Paid claim amounts may go down if providers contract in-network at a lower rate.
- Providers may come to an agreement before the arbitration process is reached, leading to both lower paid amounts and fewer claims.

3. Continued

(c) Explain why some providers may join the network and others may not.

Commentary on Question:
Candidates who performed well on this part of the question provided clear reasons for both sides. Other reasons provided in the source material besides those provided below were also accepted.

Reasons for providers to join:

- Providers do not want to undergo the QPA or IDR process imposed by the NSA as it is a burden, delays payment, and the amount is unknown until later in the process.
- Network steerage resulting from being an in-network provider could increase patient volume for providers.
- Joining the network may relieve some of the administrative burden put on providers.
- If the rates are favorable and align with their financial goals, providers may be more inclined to join the network.

Reasons for providers not to join:

- Providers may not be amenable to the reimbursement structure required to be in network (Fee for Service, Capitation, Risk sharing).
- In network steerage is not as effective for certain providers that are highly specialized, hospital based, or primarily service emergency care.
- Providers may not want to coordinate with disease management or utilization management programs required by the administrator.
- Providers may not want to adhere to other conditions outlined in the contract.

4. Learning Objectives:

2. The candidate will understand how to evaluate the effectiveness of different provider reimbursement methods from both a cost and quality point of view.

Learning Outcomes:

(2a) Calculate provider payments under various reimbursement methods.

(2b) Evaluate standard contracting methods from a cost-effective & quality perspective.

(2c) Understand contracts between providers and insurers.

(2d) Understand accountable care organizations and medical patient home models and their impact on quality, utilization and costs.

Sources:

Provider Payment Arrangements, Provider Risk, and Their Relationship with Cost of Healthcare, 2015 (excluding Appendices)

Healthcare Risk Adjustment and Predictive Modeling, Duncan, Ian G., 2nd Edition, 2018

- Ch. 22: Intro to Risk Adj: Accountable Care Organization

Commentary on Question:

Commentary listed underneath question component.

Solution:

(a) Calculate the projected net profit for the provider organization as an ACO in the next three years. Show your work.

See Excel for the solution for this part of the question.

(b) Evaluate the financial impact on the provider organization as an ACO for each of the following scenarios:

(i) Member population doubles

(ii) No reduction in utilization in year 1

(iii) The ACO fails to meet its quality requirements

(iv) Changes in the healthcare risk profile of the member population results in more high-risk, high-cost patients

4. Continued

Commentary on Question:
For this part of the question, many candidates tried to quantify the impact of each scenario from part a, which was not necessary to receive credit since the question did not require the candidate to show their work.

(i)
Member population doubling can have a positive impact on ACO financial.

- Higher Total Costs: More members mean a higher total cost baseline, which could allow more room for savings if utilization is effectively managed, because start-up costs are relatively constant.
- Increased Revenue Potential: An increased member base can result in greater shared savings if cost reductions and quality targets are achieved, as savings are typically calculated as a percentage of total cost.
- Greater Risk Exposure: With more patients, the ACO is at a higher financial risk if utilization or quality outcomes are not controlled, as each patient contributes to the overall spending target.

(ii)
No utilization reduction in Year 1 will have negative impact

- No Shared Savings Payments: Without a reduction in utilization, the ACO won't generate savings relative to the baseline, meaning it won't qualify for shared savings payouts from payers.
- Financial Strain on Operating Costs: Since many ACOs invest upfront in care coordination, analytics, and infrastructure to reduce utilization, the lack of savings would mean these investments could create a net loss.
- Potential Erosion of Stakeholder Confidence: This could make it harder to justify future investments and discourage providers from actively participating in cost-saving initiatives.

(iii)
Do not meet quality standard will have a negative financial impact

- Reduction in Shared Savings or Loss of Eligibility: Most shared savings programs adjust payouts based on quality scores, so not meeting quality targets might reduce the ACO's share of any achieved savings or even disqualify it entirely from receiving savings.
- Potential Financial Penalties: Some payers impose penalties or decrease future shared savings eligibility for consistently failing quality measures.
- Long-term Reputation and Enrollment Impact: Poor quality scores can harm the ACO's reputation, impacting its ability to attract new members, which could reduce its revenue potential in future years.

4. Continued

(iv)

More high-risk patients will typically have a negative financial impact.

- Higher Baseline Costs: An increase in high-risk patients typically raises baseline costs, which might make it more challenging to achieve significant cost savings.
- Increased Need for Care Coordination: Higher-risk patients require more intensive care coordination and chronic disease management. While this can lead to better outcomes, it also increases operating costs and may dilute potential savings.
- Potential for Higher Shared Savings if Utilization is Managed: On the positive side, successfully managing utilization in a high-risk population could result in substantial shared savings. However, this would require greater investment in resources, technology, and specialized care programs.

(c) Critique the following two statements regarding ACOs:

(i) Shared savings may be increasingly difficult to sustain after initial utilization reductions are achieved. As a result, shared savings is only a transitional model that will eventually need to be moved to capitation.

(ii) ACOs primarily drive savings through cost-cutting measures, which may compromise patient care quality in the long run. Therefore, quality incentives are secondary to financial savings in the ACO model.

Commentary on Question:
Many candidates struggled on this part of the question, often not providing enough detail to receive full credit. Candidates needed to provide a sufficient critique of the statements rather than only stating whether each statement was true or false.

(i)

- Sustainability Challenges in Shared Savings: Initial utilization reductions often target low-hanging fruit, making further savings more challenging as simpler interventions are exhausted. Subsequent savings may require costly, complex interventions that yield diminishing returns, impacting long-term sustainability.
- Capitation as an Alternative: Capitation offers predictable revenue and incentivizes efficient care through fixed per-member payments. However, capitation can risk underutilization and potential quality issues if providers overly restrict services to stay within budget. Implementing capitation effectively requires strong data infrastructure, advanced care coordination, and provider alignment, which can be costly and complex to achieve.

4. Continued

- Shared Savings as a Viable Long-Term Model: Shared savings models can remain viable, especially when combined with other payment models (e.g., partial capitation or pay-for-performance). Hybrid models allow ACOs to balance cost control with quality targets, rewarding providers for both efficiency and high-quality care.
- Potential of Data and Innovation in Shared Savings: Advances in data analytics, personalized medicine, and care coordination could allow ACOs to continue finding savings opportunities without fully transitioning to capitation. As tools and strategies improve, shared savings may provide ongoing benefits without requiring a shift to a fixed-payment model.

(ii)

- Quality Metrics as Core to Savings: In most ACO models, shared savings are closely tied to quality performance metrics, meaning ACOs must achieve specific quality benchmarks to access full savings. This design aims to ensure that financial incentives do not undermine quality but instead encourage it. Consequently, quality is not secondary; it's integral to how savings are earned.
- Cost-Cutting vs. Value-Driven Care: Rather than relying solely on cost-cutting, ACOs frequently focus on value-driven strategies like enhanced care coordination, reducing unnecessary hospitalizations, and improving preventive care. These strategies not only reduce costs but also improve patient outcomes. For example, reducing emergency department visits through effective management of chronic conditions directly benefits both patients and the ACO's financial health.
- Quality and Financial Balance: The statement suggests an imbalance between quality and financial incentives, yet the ACO model is designed to balance these objectives. Shared savings models typically adjust financial rewards based on quality scores, ensuring that reductions in cost don't come at the expense of patient care. This balance is essential for long-term sustainability in healthcare, as consistently poor quality would erode patient trust and reduce overall effectiveness.
- Focus on Long-Term Health Improvements: ACOs are generally encouraged to pursue strategies that improve long-term patient health, such as preventative screenings, chronic disease management, and medication adherence programs. These measures not only enhance care quality but also prevent costly acute episodes in the future. So, rather than viewing cost reduction as a one-time target, ACOs can achieve sustainable savings through ongoing improvements in patient health.

4. Continued

- Role of Data Analytics and Patient Engagement: Advances in data analytics, predictive modeling, and patient engagement tools empower ACOs to achieve savings while enhancing care. These tools allow ACOs to identify at-risk patients, personalize interventions, and track outcomes effectively. This data-driven approach supports a model where quality improvement and cost savings go hand-in-hand, challenging the notion that quality is of lesser importance.

5. Learning Objectives:

4. The candidate will understand how to apply risk adjustment in actuarial work.

Learning Outcomes:

(4a) The candidate will understand how to apply risk adjustment in actuarial work.

(4c) Apply applicable Actuarial Standards of Practice

Sources:

HHS-Operated Risk Adjustment Technical Paper on Possible Model Changes, Oct 2021, Ch. 1

ASOP 45 Use of Health Status Based Risk Adjustment Methodologies

Commentary on Question:

Candidates who performed well on parts (a) and (b) provided clear descriptions rather than only a list. Fewer candidates performed well on part (c). Some candidates focused on which metal tiers contained the highest and lowest risk whereas the purpose of the question was to explain why revisions were needed for the HHS risk adjustment model – not what the proposed improvements were.

Solution:

(a) Describe reasons for the following updates made to the HHS-Operated Risk Adjustment Model and the Transfer Formula in the 2018 Notice of Benefit and Payment Parameters.

1. Addition of enrollment duration factors to adult models
2. Addition of prescription drugs to the adult model
3. Establishment of a high-cost risk pool
4. Reducing the statewide average premium

Commentary on Question:

Most candidates performed well on this part of the question. Some candidates focused more on the impact to the insurer's financials instead of the impact to the risk score.

1. The addition of enrollment duration factors to adult models was done because members than enrolled mid-year were shown to have more risk due to the system missing prior conditions. The enrollment duration factors are monotonically decreasing from 1 month to 11 months. The addition of the enrollment duration factors increased the profitability of partially enrolled members.

5. Continued

2. Prescription drug data is ubiquitous and completes quicker. Prescription drug information could be used to complete diagnoses and identify information that is unavailable in medical data and can also be used as a severity indicator through HCC-RxC interaction terms.

3. The high-cost risk pool was established so that 60% of costs above $1 million for an individual were not included. This made the risk adjustment model more accurate especially for extreme costs as the outliers had a significant effect on the fit of the model.

4. By reducing the statewide average premium by 14%, we could proxy removing administrative costs from the premium and applying risk adjustment on a pure premium basis.

(b) Describe recommendations in ASOP 45 regarding the selection and implementation of an appropriate risk adjustment model.

Commentary on Question:
Most candidates were able to remember at least a few of the recommendations from ASOP 45. Candidates were asked to describe recommendations, so candidates who performed the best on this part of the question were able to provide clear descriptions of the recommendations rather than only a list.

- Intended Use: Consider the actuary's intended use of the risk adjustment model and the extent the actuary is using it to estimate.
- Impact of the Program: Should consider any unintended behaviors that may arise due to incentives created by the selected model.
- Model Version: Is the model being used an updated version of a previously used model, if so, what are the material differences.
- Population and program: should consider that the population and program that the risk adjustment model is being used for is consistent with the population and program used to develop the model.
- Transparency: Should consider the degree of transparency of the model.
- Timing: timing of the data collection, estimation and measurements should also be considered.
- Predictive ability: should consider the predictive ability of the model, and any known limitations.
- Reliance from Experts: Is any information used to develop the model relied on experts, and do these experts have expertise with risk adjustment models.
- Practical considerations: Including the cost of the model, model availability and the actuary's familiarity with the model.

5. Continued

(c)

(i) Define the lowest and highest risk enrollee subpopulations of the HHS risk adjustment model.

(ii) Explain why improvements to the prediction accuracy are indicated for these subpopulations.

Commentary on Question:
Candidates that performed well on part (c) adequately explained why improvements were needed for each subpopulation.

(i) Lowest risk enrollees – those with the lowest relative risk in the population, like young and healthy enrollees, and those with no hierarchical condition categories (HCCs)

Highest risk enrollees – The most severely ill patients with several conditions. They represent the top 0.1 percent risk and may have 6+ or 10+ HCCs.

(ii) For the lowest subpopulations:

a. The HHS risk adjustment model under predicts for adult enrollees who are the lowest risk by over 50%
b. The model also underpredicts for both child and adult enrollees that have no HCCs.
c. Enrollees with 1-5 HCCs tended to be slightly overpriced
d. These members represent a large proportion of the individual market, but the dollar impact is small because the annual costs of this group are very low on average.

For the highest subpopulation:

a. The HHS risk adjustment model also under predicts for enrollees in the top 0.1 percent risk percentile by 9%
b. Enrollees with 10+ HCCS were underpredicted by 17%
c. They represent the highest cost of the populations, and accuracy of condition coding is the most significant differential for issuers and their risk adjustment transfer amounts.
d. The HHS-HCC model does not account for the interaction between the HCCs and the co-morbidities that the very highest risk enrollees have.
e. The highest risk subpopulation is often among the individuals exceeding the $1 million high-cost risk pool threshold

6. Learning Objectives:

3. The candidate will understand how to evaluate healthcare intervention programs.

Learning Outcomes:

(3b) Estimate savings, utilization rate changes and return on investment.

(3d) Calculate chronic and non-chronic trends in a manner that reflects patient risk.

Sources:

Managing and Evaluating Healthcare Intervention Programs, Duncan, Ian G., 2nd Edition, 2014

- Ch. 13: Understanding Patient Risk and Its Impact on Chronic and Non-Chronic Member Trends

Commentary on Question:

This question is based on Duncan Chapter 13. The nodes were created and stratified according to logic behind the decision tree shown in Figure 13.3.

Solution:

(a) Calculate the PMPM savings for the program in year 1 under the following approaches. Show your work.

(i) Without risk adjustment

(ii) With risk adjustment

See Excel for the solution for this part of the question.

(b) Recommend an approach from part (a). Justify your response.

Commentary on Question:

Candidates generally performed well on this part of the question. Candidates needed to explain that risk adjustment is necessary because there is a change in population, and the populations in the baseline and program year 1 have different risk levels.

The risk adjustment approach should be used. This is necessary to account for population changes unrelated to the intervention and to estimate the true savings of implementing the program. By rebalancing the risk mix across population subgroups, we can compare results at a consistent risk level and isolate the program's effect from any external influences.

7. Learning Objectives:

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

Learning Outcomes:

(1a) Describe structure of employee benefit plans and products offered and the rationale for offering these structures.

(1b) Describe elements of flexible benefit design and management.

Sources:

Rosenbloom Ch. 2 Functional Approach

Commentary on Question:

Commentary listed underneath question component.

Solution:

(a)

(i) Describe the functional approach to designing and evaluating employee benefits.

(ii) Explain why the functional approach is needed.

Commentary on Question:

Most candidates performed well on this part of the question.

(i)

- A systemic method of analysis to an employer's total employee benefits program
- Analyzes employer's total benefits program
- Analyzes employer's program as a coordinated whole in terms of its ability to meet employers and employee's needs

(ii) The functional approach is needed for several reasons:

- Employee benefits are a significant element of total comp
- Employee benefits represent a large item of labor cost
- Employee benefits may have been adopted by employers on a piecemeal basis without coordination with existing programs
- New benefits and coverages, changes in tax laws, changes in regulations, and other developments in employee benefit planning, it is important to have a systemic approach

7. Continued

(b) Recommend changes to the company's current benefits. Justify your response.

Commentary on Question:
Candidates performed well on this part of the question. The solution below is one acceptable response, but other recommended changes relevant to the question were also acceptable.

- Salary can be maintained near current levels
- Offer an HMO plan, and lower deductible PPO plan to offer more options to employees with different needs
- Increase the 401k match to 6%
- Offer STD and LTD benefits
- Bonus targets should be lowered or increased, so difficult to receive maximum bonus
- Limit stock awards to management and reduce the overall amount of stock granted
- Offer short-term and long-term disability insurance with subsidies
- Offer Basic and Primary life insurance plans
- Offer LTC insurance with a small subsidy

(c) Describe how the company's benefits apply to the functional categories.

Commentary on Question:
The response below is provided in relation to the proposed benefits above, but it was also acceptable for candidates to respond in terms of the current benefits.

- Medical expenses: HMO plan and PPO plan
- Disability losses: STD and LTD plans with or without subsidies, LTC insurance
- In case of death: basic and primary life insurance
- Retirement: increase the 401K match to 6%
- Capital Accumulation: salary maintained at current levels, bonus target changed, limit stock awards and reduce stock granted

8. Learning Objectives:

4. The candidate will understand how to apply risk adjustment in actuarial work.

Learning Outcomes:

(4a) The candidate will understand how to apply risk adjustment in actuarial work.

Sources:

Healthcare Risk Adjustment, Risk Adjustment in Medicare - Ch. 14

Commentary on Question:

This question was testing candidates' knowledge of risk adjustment and how it varies between Medicare, Medicaid, and ACA Exchanges.

Solution:

(a) Explain the differences between the MA Part C normalization and coding intensity risk adjustment factors.

Commentary on Question:

Candidates often knew one or both concepts at a high-level, but many struggled to provide a full response, explaining the difference between both concepts.

- The Part C normalization factor is a mathematical adjustment required to account for the underlying FFS trend in risk scores and the effect of that trend on average risk scores between the model denominator year and the payment year. It is designed to bring the average risk score back to 1.0.
- The MA Coding Adjustment factor accounts for the difference in diagnostic coding pattern differences between MA and FFS. All else being equal, CMS has determined that there is a difference between the average risk score for Medicare Advantage and that of traditional A/B Medicare, and this must be recognized in the risk score projection process to determine the appropriate risk revenue payments to MAOs.

(b) Critique the following statements regarding Medicare Advantage Part C and/or Part D risk score calculations:

(i) A Medicare enrollee on 1/1/ 2024 didn't seek any medical care in 2024, however, on 10/1/2025, was newly diagnosed with congestive heart failure as a member on a MA plan. Claims costs associated with this newly diagnosed condition will be adequately compensated in 2025.

(ii) Both Part C and Part D payments from CMS are risk-adjusted and have the same risk score.

(iii) Adjusting the risk score in MA bids from a projected value of 1.00 to 1.02 without a corresponding increase in the expected claims morbidity will increase revenue from CMS without any consequences.

8. Continued

Commentary on Question:
Many candidates performed well on part (i) but struggled with providing sufficient details on parts (ii) and (iii).

(i) Medicare risk adjustment is prospective. Enrollee risk scores are based on diagnoses corresponding to the prior year. Since the enrollee didn't seek any medical care in 2024, the enrollee will have a demographic based risk score not adjusted for any conditions. Thus, the MAO will not be adequately compensated for this enrollee in 2025.

(ii) While both Part C and Part D risk scores are based on diagnoses, the Part C risk score predicts the allowed per capita claim cost for medical claims for the standard A/B Medicare covered benefits; this means gross to member cost-sharing. Part D is different. The PD risk score predicts the net cost of Part D coverage for a basic plan; that is, after the member cost-sharing is removed from a basic Part D pharmacy plan. This net cost is the payer's liability.

(iii) The effect of aggressively overstating risk score improvement in the bid should not be summarily dismissed. If the overstatement is too severe, it can result in losses from which the MAO may not recover. If the risk score improvement is overstated, it is likely that the MAO's plan of benefits will be richer than it should be. There can also be compliance/audit risk.

(c) Compare and contrast risk adjustment for the following programs:

- Medicare
- Medicaid
- ACA Exchanges

Commentary on Question:
Candidates generally knew some similarities and differences of risk adjustment for these three programs.

- Medicare is prospective whereas ACA is concurrent meaning a member must be coded for a condition in the prior year in order for plan to receive the appropriate risk adjusted payment under Medicare.
- ACA risk adjustment is a "zero sum" method in contrast to Medicare which is not.
- All three risk adjustment mechanisms are predictive models correlating payment to plans for health conditions of members

8. Continued

- All three risk adjustment mechanisms aim to reduce incentive for health plans to avoid enrolling high-cost members
- Unlike Medicare and Medicaid, ACA risk adjustment must account for different levels of benefit design (i.e. actuarial value), which poses problems
- Medicare risk adjustment uses different models for sub-populations such as ESRD. ACA does not.
- Medicare and ACA utilize HCC's, whereas Medicaid programs necessarily don't.
- Medicare risk adjustment is a uniform method at the national level, but ACA and Medicaid can have state-by-state differences adding to the complexity.
- Particularly Medicaid, less so for ACA and far less so for Medicare, must properly account for newborns who have no prior claim experience.