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**SOCIETY OF ACTUARIES**  
**Group and Health – Company/Sponsor Perspective**

# Exam CSP-GH

## MORNING SESSION

**Date:** Friday, April 29, 2011

**Time:** 8:30 a.m. – 11:45 a.m.

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### INSTRUCTIONS TO CANDIDATES

#### General Instructions

1. This examination has a total of 120 points. It consists of a morning session (worth 60 points) and an afternoon session (worth 60 points).
  - a) The morning session consists of 9 questions numbered 1 through 9.
  - b) The afternoon session consists of 11 questions numbered 10 through 20.

The points for each question are indicated at the beginning of the question. Questions 7 - 9 pertain to the Case Study, which is enclosed inside the front cover of this exam booklet.
2. Failure to stop writing after time is called will result in the disqualification of your answers or further disciplinary action.
3. While every attempt is made to avoid defective questions, sometimes they do occur. If you believe a question is defective, the supervisor or proctor cannot give you any guidance beyond the instructions on the exam booklet.

#### Written-Answer Instructions

1. Write your candidate number at the top of each sheet. Your name must not appear.
2. Write on only one side of a sheet. Start each question on a fresh sheet. On each sheet, write the number of the question that you are answering. Do not answer more than one question on a single sheet.
3. The answer should be confined to the question as set.
4. When you are asked to calculate, show all your work including any applicable formulas.
5. When you finish, insert all your written-answer sheets into the Essay Answer Envelope. Be sure to hand in all your answer sheets since they cannot be accepted later. Seal the envelope and write your candidate number in the space provided on the outside of the envelope. Check the appropriate box to indicate morning or afternoon session for Exam CSP-GH.
6. Be sure your written-answer envelope is signed because if it is not, your examination will not be graded.

Tournez le cahier d'examen pour la version française.



## **CASE STUDY INSTRUCTIONS**

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

**\*\*BEGINNING OF EXAMINATION\*\***  
**Morning Session**

- 1.** (3 points) Point Loma (PL) is a provider owned Accountable Care Organization (ACO) that offers insurance plans to the Individual Medicare market. PL's management is concerned about the impact of responsible health care reform to their business.
- (a) (1 point) Identify the components of responsible health care reform designed to reduce the utilization rates of the most costly and time consuming procedures.
  - (b) (1 point) Identify the Provider Payment Reforms in responsible health care reform aimed at reducing long-term healthcare costs.
  - (c) (1 point) List the financial reasons why PL should focus on the quality of their Medicare health plans.
- 2.** (7 points) Your company has purchased a long-term care (LTC) block of business. The administrative system is included in the purchase, but not the valuation system.
- (a) (2 points) List and describe the types of reserves required for this product line.
  - (b) (1 point) Describe the data integrity issues you may find with information used to perform valuations.
  - (c) (1 point) Describe methods to test adequacy of calculated reserves.
  - (d) (2 points) List and describe the key modeling components used in setting LTC premium deficiency reserves.
  - (e) (1 point) List guidance provided by Actuarial Standard of Practice #18 "LTC Insurance".

- 3.** (6 points) You hired five interns for the summer to update an experience study which will determine future rate filing opinions. Without your review or approval, the most ambitious intern sent the updated study directly to the chief actuary, who then filed a rate filing with the state based on the experience study.
- (a) (1 point) Provide the definition of a statement of actuarial opinion per the Revised Qualification Standards.
  - (b) (2 points) Determine whether or not the experience study was a statement of actuarial opinion. Justify your answer.
  - (c) (3 points) Explain the steps of the Actuarial Board for Counseling and Discipline inquiry process.
- 4.** (4 points) Your company sells individual disability income and individual major medical products:
- (a) (1 point)
    - (i) Describe renewability provisions that occur in individual accident and health products.
    - (ii) Identify which renewability provisions are common for your company's products.
  - (b) (1 point) Outline the major characteristics of your company's products with respect to:
    - (i) benefit design
    - (ii) premium structure
    - (iii) risk components
  - (c) (1 point) List guidance available on continuance tables and interest rates based on Generally Accepted Accounting Principles (GAAP) for individual disability claim reserves.
  - (d) (1 point) Describe considerations used to make assumptions for lapse rates, expenses and commissions based on GAAP for individual health.

**5.** (6 points) An individual life carrier has decided to enter the group health marketplace by acquiring a block of existing business.

- (a) (1 point) List considerations for determining if this acquisition is a good match for the buyer and seller.
- (b) (4 points) With respect to actuarial appraisals, describe:
  - (i) Components
  - (ii) Assumptions
- (c) (1 point) List items that are unique to the valuation of insurance companies.

**6.** (3 points)

- (a) (1 point) Identify and describe the major constituents a managed care organization must consider when developing products.
- (b) (1 point) List the major steps in the managed care sales process and describe marketing's role in each step of the process.
- (c) (1 point) Describe the marketing strategies used for each constituent.

**Questions 7 - 9 pertain to the Case Study.**  
**Each question should be answered independently.**

- 7.** (13 points) Bird-Havlicek Hospital System (BHHS) and Jabaar-Walton Hospital System (JWHS) are the only two hospital systems in Wooden county. Great Expectations Insurance Company (GEIC) currently has a Fee For Service (FFS) arrangement with BHHS. GEIC is considering a capitated arrangement with JWHS for inpatient services only. Their current arrangement with BHHS will remain as is.
- (a) (1 point) List sources of data for developing actuarial cost models.
- (b) (1 point) List key assumptions regarding utilization, average costs and PMPM targets which impact the uniqueness of contracting situations.
- (c) (1 point) List the quality considerations GEIC should assess when evaluating JWHS as a network partner.

Assume the following:

- GEIC would pay JWHS 40% of total premium.
  - Total premium will be \$130 per member per month (PMPM) during the contract period.
  - JWHS has administrative costs equal to 5% of premium plus a fixed expense of \$3.00 PMPM.
  - JWHS has a required profit margin of 2% of premium.
- (d) (4 points) Calculate the shortfall JWHS can expect if it enters into this contract. Show your work.
- (e) (2 points) Recommend and justify approaches JWHS can take to eliminate the shortfall.
- (f) (2 points) Identify the potential risks JWHS would assume under this proposal.
- (g) (2 points) Assess advantages and disadvantages of this proposal from GEIC's perspective.

*Questions 7 - 9 pertain to the Case Study.  
Each question should be answered independently.*

- 8.** (11 points) You are John Joseph Yossarian and you work in the business development area of Catcher In The Rye Company (CITR). You are considering investing in Light in August Company (LAC), which sells high deductible health plans (HDHP) to groups and individuals.

In addition to the email he sent you on August 26, your investment banker, Randle McMurphy, has also told you the following:

Projections for LAC's Performance next year:

<u>Probability</u>	<u>Expected Return</u>
40%	8%
30%	3%
30%	25%

11.6% = Weighted Average Expected Return

Projections for the market's performance next year:

<u>Probability</u>	<u>Expected Return</u>
25%	- 2%
50%	5%
25%	10%

4.5% = Weighted Average Expected Return

LAC and the market have a correlation of 0.75.  
LAC has equal balances of debt and shareholder equity.

- (a) (5 points) Recommend whether to invest in LAC based on cost of capital. Show your work.
- (b) (2 points) Explain how you would analyze the investment differently if LAC were a Pharmacy Benefits Manager (PBM) instead of an insurer.
- (c) (4 points) Recommend whether CITR should invest in LAC if LAC were a PBM. Show your work.

**Questions 7 - 9 pertain to the Case Study.**  
**Each question should be answered independently.**

- 9.** (7 points) Dombey and Sons, Inc. (Dombey) has expressed concern regarding the increased costs due to the passage of the Patient Protection and Affordable Care Act (PPACA). Due to the expanded individual market, Dombey is considering dropping its medical coverage all together. Dombey has at least one full time employee that is eligible for a premium tax credit and is expected to enroll through an exchange. Dombey has hired you to evaluate whether they should continue providing coverage to their employees after 1/1/2014.

	Union Plan	Non-Union Plan
Employee's Share of Premium Per month on 1/1/2014:	\$217.32	\$264.12
Actuarial Value of Plan	82%	65%

Estimated Annual Salary Range as of 1/1/2014	Number of Union Full-time Employees	Number of Non-Union Full-time Employees
\$0 - \$9,999	3	7
\$10,000 - \$14,999	64	42
\$15,000 - \$29,999	246	139
\$30,000 - \$59,999	612	312
\$60,000 - \$99,999	115	10
\$100,000 +	17	2
Total	1,057	512

- (a) (4 points) Calculate the financial penalties that Dombey would be assessed as of 1/1/2014 if they:
- (i) Eliminated their medical insurance benefits. Show your work.
  - (ii) Continued offering medical coverage. Show your work.
- (b) (3 points) List the PPACA provisions that will impact Dombey's benefits for each plan year, 2011, 2012, 2013, and 2014. Assume they are grandfathered until 1/1/2014.

**\*\*END OF EXAMINATION\*\***  
**Morning Session**

**USE THIS PAGE FOR YOUR SCRATCH WORK**

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