

Group and Health Advanced Exam

Spring/Fall 2018

Important Exam Information:

[Exam Registration](#)

Candidates may register online or with an application.

[Order Study Notes](#)

Study notes are part of the required syllabus and are not available electronically but may be purchased through the online store.

[Introductory Study Note](#)

The Introductory Study Note has a complete listing of all study notes as well as errata and other important information.

[Case Study](#)

A copy of the case study will be provided with the examinations. Candidates will not be allowed to bring their copy of the case study into the examination room.

[Past Exams](#)

Past Exams from 2000 - present are available on the SOA website.

[Updates](#)

Candidates should be sure to check the Updates page on the exam home page periodically for additional corrections or notices.

Recognized by the Canadian Institute of Actuaries

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1. Topic: Provider Reimbursement

Learning Objectives

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

Learning Outcomes

The Candidate will be able to:

- a) Calculate provider payments under various reimbursement methods
- b) Evaluate standard contracting methods from a cost-effective & quality perspective
- c) Understand contracts between providers and insurers
- d) Understand accountable care organizations and medical patient home models and their impact on quality, utilization and costs
- e) Evaluate the effectiveness of various methods of controlling costs and providing quality care-within pharmacy benefits

Resources

- *Essentials of Managed Health Care*, Kongstvedt, Peter R., 6th Edition, 2013
 - Ch. 4: The Provider Network
 - Ch. 10: Data Analysis and Provider Profiling in Health Plans
 - Ch. 11: Prescription Drug Benefits in Managed Care
 - Ch. 12: Introduction to Managed Behavioral Health Care Organizations
- GHA-102-13: Evaluating Bundled Payment Contracting
- GHA-110-15: Commonwealth Fund Paper – The Final Rule for the Medicare Shared Savings Program
- GHA-119-18: Physician Remuneration Options (pp. 3-11)
- GHA-120-18: Avoiding Unintended Consequences in ACO Payment Model
- [Provider Payment Arrangements, Provider Risk, and Their Relationship With Cost of Healthcare](#) (excluding Appendices)

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2. Topic: Healthcare Interventions

Learning Objectives

The candidate will understand how to evaluate healthcare intervention programs.

Learning Outcomes

The Candidate will be able to:

- a) Describe, compare and evaluate programs
- b) Estimate savings, utilization rate changes and return on investment
- c) Describe the considerations in the design, implementation and evaluation of a program
- d) Describe value chain analysis as it applies to the planning and management of a program
- e) Apply the actuarially adjusted historical control methodology
- f) Calculate chronic and non-chronic trends in a manner that reflects patient risk
- g) Apply methodologies to reduce random fluctuation and maintain validity for program effectiveness studies

Resources

- *Managing and Evaluating Healthcare Intervention Programs*, Duncan, Ian G., 2nd Edition, 2014
 - Ch. 1: Introduction (background only)
 - Ch. 2: Clinical Background (background only)
 - Ch. 3: Care Management Programs and Interventions
 - Ch. 4: Actuarial Issues in Care Management Evaluations
 - Ch. 6: The Use of the Value Chain in Care Management Program Planning
 - Ch. 8: Understanding the Economics of Care Management Programs
 - Ch. 9: Applying the Economic Model: the Example of Opportunity Analysis
 - Ch. 10: Measuring Care Management Savings Outcomes
 - Ch. 11: The Use of Propensity Scoring in Program Evaluation
 - Ch. 12: An Actuarial Method for Evaluating Care Management Outcomes (excluding Appendices 12.2 and 12.3)
 - Ch. 13: Understanding Patient Risk and Its Impact on Chronic and Non-Chronic Member Trends
 - Ch. 14: Random Fluctuations and Validity in Measuring Disease Management Effectiveness for Small Populations (excluding Appendix)
- GHA-112-16: Commonwealth Fund – the Road to Accountable Care

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- GHA-113-16: Population Health Alliance and HERO– Program Management and Evaluation Guide, Ch. 1 and 2

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3. Topic: Reserving

Learning Objectives

The candidate will understand and apply valuation principles for insurance contracts.

Learning Outcomes

The Candidate will be able to:

- a) Describe the types of claim reserves (e.g., due and unpaid, ICOS, IBNR, LAE, PVANYD)
- b) Explain the limitations and biases of the traditional valuation methods:
- c) Calculate appropriate claim reserves given data
- d) Reflect environmental factors in reserve calculations (trend, seasonality, claims processing changes, etc.)
- e) Evaluate data resources and appropriateness for calculating reserves
- f) Describe, calculate and evaluate non-claim reserves and explain when each is required
- g) Apply applicable standards of practice related to reserving

Resources

- *Group Insurance*, Skwire, Daniel D., 7th Edition, 2016
 - Ch. 37: Claim Reserves for Short-Term Benefits
 - Ch. 38: Claim Reserves for Long-Term Benefits
- *Individual Health Insurance*, Bluhm, William and Leida, Hans, 2nd Edition, 2015
 - Ch. 6: Reserves and Liabilities
- GHA-103-16: Health Reserves (Lloyd)
- GHA-114-16: Canadian Standards of Practice, sections 2130 and 2300 (excluding 2320.35 to 2320.39, 2340, 2350.19 to 2350.30, 2350.40 to 2350.50 and 2360), March 2015
- [CIA Educational Note - Valuation of Group Life and Health Policy Liabilities](#), Sections 6-14
- [AAA Premium Deficiency Reserves Discussion Reports](#)
- [Health Section News, 10/2004, Read, Write, Think](#)
- [ASOP 5: Incurred Health and Disability Claims](#) (excluding Appendix)
- [ASOP 23: Data Quality](#) (excluding Appendix)
- [ASOP 28: Statements of Actuarial Opinion Regarding Health Insurance Liabilities and Assets](#) (excluding Appendix)
- [ASOP 41: Actuarial Communications](#) (excluding Appendix)

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- [ASOP 42: Determining Health and Disability Liabilities Other Than Liabilities for Incurred Claims](#)
(excluding Appendix)
- [Financial Reporting Implications Under the Affordable Care Act, Section IV](#)
- [Claim Reserve Model—How Actuaries Rely Upon the Claim Data They Receive, Long Term Care News,](#)
September 2008

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4. Topic: Underwriting

Learning Objectives

The candidate will understand how to apply principles of pricing, risk assessment and funding to an underwriting situation.

Learning Outcomes

The Candidate will be able to:

- a) Understand the risks and opportunities associated with a given coverage, eligibility requirement or funding mechanism
- b) Understand, evaluate and apply various risk adjustment mechanisms
- c) Recommend strategies for minimizing or properly pricing for risks
- d) Describe and apply approaches to claim credibility and pooling
- e) Apply applicable Actuarial Standards of Practice

Resources

- *Group Insurance*, Skwire, Daniel D., 7th Edition, 2016
 - Ch. 21: Estimating Medical Claim Costs (pp. 356-361)
 - Ch. 27: Experience Rating and Funding Methods
 - Ch. 30: Group Insurance Underwriting
 - Ch. 31: Managing Selection in a Multiple-Choice Environment
 - Ch. 33: Health Risk Adjustment
- *Individual Health Insurance*, Bluhm, William and Leida, Hans, 2nd Edition, 2015
 - Ch. 4: Managing Antiselection (pp. 109-148)
- GHA-104-15: Actuarial Aspects of Employer Stop Loss
- GHA-118-17: Issues to Consider in Self-Funding Long-Term Disability Insurance
- GHA-121-18: Assuris for Group Insurance in Canada
- [ASOP 45: The Use of Health Status Based Risk Adjustment Methodologies](#)
- [Level Funding: An Alternative to ACA for Small Groups, Health Watch](#), May 2016
- [Issues In Applying Credibility to Group Long-Term Disability Insurance](#) (pp. 5-15)
- [A Practical Approach to Assigning Credibility for Group Medical Insurance Pricing](#)