Exam Group/Health Design & Pricing

Learning Objectives

- Understand and evaluate the effectiveness of the various types of Single Employer group coverage typically
 offered under:
 - Group health plan, including Consumer driven plans, etc.
 - Prescription Drug
 - Group dental plan
 - STD or LTD plan (incl. mention of coverage within other plans)
 - Group life plan
 - Post ret coverages

Learning Outcomes

The candidate will be able to:

- a) Describe the various coverages, including typical benefit provisions, eligibility requirements, cost-sharing provisions, limits and funding mechanisms
- b) Identify the potential gaps in needed or desired coverages
- c) Identify which participants would find each coverage a valued benefit and why
- d) Assess the advantages and disadvantages to an sponsor of offering a given coverage/benefit
- e) Evaluate potential financial, legal and moral risks associated with each coverage
- f) Recommend policy provisions to minimize the risks identified above
- g) Assess the advantages and disadvantages to an participant of offering a given coverage/benefit
- h) Evaluates several coverage scenarios as alternatives to a given scenario

- The Handbook of Employee Benefits ,(Sixth Edition), Rosenbloom, J.S.
 - o Ch. 6, Understanding Managed Care Health Plans: The Managed Care Spectrum
 - o Ch. 11, Alternative Prescription Drug Plans and Their Impact on Employers
 - o Ch. 12, Understanding Managed Behavioral Health Care Benefits
 - o Ch. 46, Preventive Health Car Strategies: An Overview for Employers
- Group Insurance, (Candidates may use the Fourth or Fifth Edition), Bluhm, W. F.,
 - o Ch. 11, Miscellaneous Benefits in both editions
- Managed Healthcare Handbook, Kongstvedt, P.R.
 - o Ch. 60, Managed Care Dental Benefits
- GH-D100-07 (Formerly 8G-604-05): Specialty Accident and Health Products
- GH-D101-07 (Formerly 8G-600-00): Group Disability Insurance (sections 1, 8, 10, 11)
- GH-D102-07: Group Life Insurance, **Introduction**, **Sections 1–3**
- GH-D103-07: Pricing Long Term Care, pp. 1-9

Exam Group/Health Design & Pricing

Learning Objectives

- 2. Understand and evaluate the effectiveness of the various types of INDIVIDUAL and multi-life coverage typically offered under:
 - Individual health plan
 - LTC or
 - Individual DI plan
 - Medicare Supplement

Learning Outcomes

The candidate will be able to:

- a) Describe the various coverages, including typical qualifications for benefits, coverage eligibility, costsharing provisions, limits, and funding mechanisms
- b) Identify the potential gaps in needed or desired coverages
- c) Identifies which insureds would find each coverage a valued benefit and why
- d) Evaluate potential financial, legal and moral risks associated with each coverage
- e) Recommend policy provisions to minimize the risks identified above
- f) Evaluates several coverage scenarios as alternatives to a given scenario

- Individual Health Insurance, O'Grady, F.T.
 - o Ch. 2, Individual Medical Expense Benefits
 - o Ch. 3, Individual Disability Income Benefits
- GH-D103-07: Pricing Long-Term Care
- GH-D104-07: Pricing Medicare Supplement Benefits, Sections I&II
- GH-D105-07 (Formerly 8G-500-00): Direct Marketing

Exam Group/Health Design & Pricing

Learning Objectives

3. Understand and evaluate the effectiveness of the various types of coverage offered through other group vehicles: Multiemployer; Taft-Hartley; Group Credit; trade associations; professional associations; discretionary groups, etc.

Learning Outcomes

The candidate will be able to:

- a) Describe the entity and the qualifications and legal constraints on the definition and operation of the entity
- b) Describe the typical coverages, including qualifications for benefits, coverage eligibility, cost-sharing provisions, limits, and funding mechanisms
- Contrast these products with single employer group products, with regards to design, underwriting and pricing
- d) Contrast these products with individual products, with regards to design, underwriting and pricing

- GH-D106-07: EBRI Fundamentals of Employee Benefit Programs, Ch. 14, Multi-Employer Plans
- GH-D107-07 (Formerly 422-24-88): Actuarial Aspects of Taft-Hartley Welfare Plans, Reserves, Claim Forecasts, and Setting Contribution Levels

Exam Group/Health Design & Pricing

Learning Objectives

- 4. Evaluates employer strategies for designing and funding benefit plans for:
 - i) Active employees
 - ii) Dependents
 - iii) Pre-65 retirees
 - iv) Post-65 retirees
 - v) Disabled (short and long-term)

Learning Outcomes

The candidate will be able to:

- a) Describe typical strategies used by employers to fund and design benefit plans, including contribution strategies
- b) Evaluate potential financial, legal, moral risks associated with each strategy
- c) Recommend benefit, eligibility, or funding provisions to minimize each of the risks identified above
- d) Evaluate integration strategies with government programs (e.g., Parts A,B, and D of Medicare)
- e) Describe opportunities to encourage employees to be more health and cost conscious and to return to work early

- Canadian Handbook of Flexible Benefits, (Candidates may use the Second or Third edition), McKay, R.J.
 - o Ch. 3, Starting a Flexible Program , Second Edition and Ch. 3, Starting and Maintaining a Flexible Program in the Third Edition
 - Ch. 7, Flexible Expense Accounts in the Second Edition and Ch. 7, Flexible Accounts Health Spending, Personal, and Perquisite in the Third Edition
 - o Ch. 22, Case Studies (pp. 411-434 only), Second Edition, Chapter 23 in the Third Edition
- The Handbook of Employee Benefits, (Sixth Edition), Rosenbloom, J.S.
 - o Ch. 1, The Environment of Employee Benefit Plans
 - o Ch. 2, Functional Approach to Designing & Evaluating Employee Benefits
 - o Ch.3, Risk Concepts and Employee Benefit Planning
 - o Ch.7, Understanding Managed Care Health Plans: Understanding Costs and Evaluating Plans
- Fundamentals of Retiree Group Benefits, Yamamoto, D.H.
 - o Ch. 1, Introduction
 - o Ch. 2, Erosion of Retiree Health Benefits
 - o Ch. 4, Retiree Benefit Design
 - o Ch. 5, Funding

Exam Group/Health Design & Pricing

Learning Objectives

5. Evaluate the various types of coverages typically offered under a government health plan (e.g., Medicare, Medicaid, Canadian health plan, Social Security Disability Income, states' Temporary Disability Income programs, Workers Compensation, etc.)

Learning Outcomes

The candidate will be able to:

- a) Describe the various coverages, including typical qualifications for benefits, coverage eligibility, costsharing provisions, limits, taxation and funding mechanisms
- b) Identify the potential gaps in needed or desired coverages
- c) Assess the social good and risks associated with each coverage

- Canadian Handbook of Flexible Benefits, (Candidates may use the Second or Third Edition), McKay, R.J.
 - o Ch.4, Coverage and Eligibility, Second Edition, Ch. 4, Plan Structure and Eligibility, Third Edition
 - o Ch. 5, Health Care (section 5.9, Provincial Health Insurance Plans only), Second Edition, Ch. 5, Section 5.12, Third Edition
- The Handbook of Employee Benefits ,(Sixth Edition), Rosenbloom, J.S.
 - o Ch. 22, Social Security and Medicare (pp. 529-549 and 559-565 only (Social Security)
- Group Insurance, (Candidates may use the Fourth or Fifth Edition), Bluhm, W.F.
 - o Ch. 7, Medical Benefits in Canada in both editions
 - o Ch. 12, Government Old-Age, Survivors, and Disability Plans in the U.S. in both editions
 - o Ch. 13, Government Health Care Plans in the U.S. in both editions (Medicaid Section only pp. 237-243 in the Fourth Edition and pp. 237-244 in the Fifth Edition)
- Managed Health Care Handbook, (Fourth Edition), Kongstvedt, P. R.
 - o Ch.55, Medicare and Managed Care
 - o Ch. 56, Medicare+Choice: The Health Plan's View
 - o Ch. 57, Medicaid Managed Care
 - o Ch. 61, Workers' Compensation Managed Care: The Search for Integration
- Fundamentals of Retiree Group Benefits, Yamamoto, D.H.
 - o Ch. 3, Medicare

Exam Group/Health Design & Pricing

Learning Objectives

6. Apply U.S. and Canadian nation-specific regulation to product design and pricing

Learning Outcomes

The candidate will be able to:

- a) Determine if given policy provision is compliant with the regulation
- b) Describe key provisions of major legislation
- c) Evaluate the potential financial and moral risk associated with the legislation
- d) Determine the potential impact on the cost of complying with the regulation

- Group Insurance, (Candidates may use the Fourth or Fifth Edition), Bluhm, W.F.
 - o Ch. 21, Small Group Rate Filings and Certifications in both editions
- Individual Health Insurance, O'Grady, F.T.
 - o Ch. 1, Introduction
 - o Ch. 10, Individual Health Insurance Policy Forms
- Managed Health Care Handbook, (Fourth Edition), Kongstvedt, P.R.
 - Ch. 2, Managed Care's Regulatory Evolution: Driving Change in the New Century
- GH-D101-07 (Formerly 8G-600-00): Group Disability Insurance (section 5 only)
- GH-D103-07: Pricing Long-Term Care
- GH-D104-07: Pricing Medicare Supplement Benefits, Section III & Appendix A
- GH-D108-07: EBRI Issue Brief 273 Health Savings Accounts and Other Account- Based Products

Exam Group/Health Design & Pricing

Learning Objectives

7. Apply U.S. and Canadian taxation rules to employer and individual health plan

Learning Outcomes

The candidate will be able to:

- a) Recommend strategy for legally minimizing taxes for both employer and employee
- b) Describe key provisions of major regulation
- c) Assess pricing impact of taxation on employer, employee or policy holder

- Canadian Handbook of Flexible Benefits, (Candidates may use the Second or Third Edition), McKay, R.J.
 - o Ch. 11, Taxation of Flexible Benefits, Second Edition, Ch. 12, Third Edition
 - o Ch. 12, Discrimination Issues, Second Edition, Ch. 13, Third Edition
- The Handbook of Employee Benefits, (Sixth Edition), Rosenbloom, J.S.
 - o Ch. 37, Cafeteria Plan Design and Administration
- GH-D102-07: Group Life Insurance, Section 4
- GH-D103-07: Pricing Long-Term Care

Exam Group/Health Design & Pricing

Learning Objectives

8. Understand techniques for utilization and claims management

Learning Outcomes

The candidate will be able to:

- a) Describe the techniques used for utilization management
- b) Compare the advantages and disadvantages of each technique

- Group Insurance, (Candidates may use the Fourth or Fifth Edition), Bluhm, W.F.
 - o Ch. 25 Claim Administration and Management, Fourth Edition and Chapter 27 in the Fifth Edition
- *Managed Health Care Handbook*, (Fourth Edition), Kongstvedt, P.R.
 - o Ch. 64, Legal Liability Related to Medical Management Activities
- GH-D109-07: Medical Underwriting: Approaches and Regulatory Restrictions (Milliman Research Report)
- Understanding the Economics of Disease Management Programs, Health Section News, Aug 2003 http://www.soa.org/library/newsletters/health-section-news/2003/august/hsn0308.pdf
- An Introduction to Care Management Interventions & their Implications for Actuaries:
 - Paper 1: Programs & Interventions, Dove/Duncan http://www.soa.org/research/files/pdf/Paper1-Programs-Interventions.pdf
 - Paper 2: Actuarial Issues in Care Management Evaluations, Dove/Duncan http://www.soa.org/research/files/pdf/Paper2-Actuarial-Issues-Care-Mgmt-Eval.pdf
 - Paper 3: Estimating Savings, Utilization Rate Changes, and ROI from Care Management Interventions, Dove/Duncan (exclude appendix) http://www.soa.org/research/files/pdf/Paper3-Literature-Review.pdf
 - Paper 4: Understanding the Economics of Disease Management Programs, Duncan http://www.soa.org/research/files/pdf/Paper4-Economics-of-DM-Programs.pdf
 - o Paper 5: Evaluating Disease Management Savings Outcomes, Duncan http://www.soa.org/research/files/pdf/Savings_Methodologies_20051005(Paper%205)_final.pdf
 - Paper 6: An Actuarial Method for Evaluating Disease Management Outcomes, Duncan http://www.soa.org/research/files/pdf/Paper6-Actuarial-Methodology-for-Evaluating-DM.pdf

Exam	Group/Health Design & Pricing
------	-------------------------------

Learning Objectives

9. Understand predictive modeling techniques

Learning Outcomes

The candidate will be able to:

- a) Describe how predictive modeling techniques are used in underwriting, pricing and claims management
- b) Describe typical predictive modeling techniques
- c) Evaluate the advantages and disadvantages of each technique

- Assessing Predictive Modeling Tools for Pricing and Underwriting, *Health Watch*, Jan, 2006 http://www.soa.org/library/newsletters/health-watch-newsletter/2006/january/hsn0601.pdf
- Predictive Modeling Applications, RSA 31, #2, Session 3pd http://www.soa.org/library/proceedings/record-of-the-society-of-actuaries/2005/june/rsa05v31n23pd.pdf
- GH-D110-07: An Introduction to Predictive Modeling for Disease Risk Stratification
- Predictive Modeling: Considerations for Care Management Applications, *Health Section News*, 4/2004, pg
 13-15 http://www.soa.org/library/unclassified/hsn0404.pdf
- GH-D111-07: "Predictive Modeling and Finding and Intervening with the High-Cost Healthcare Consumer", Haelan Group Whitepaper,

Exam Group/Health Design & Pricing

Learning Objectives

10. Evaluate the process and be able to develop a medical manual rate for both ASO and insured business

Learning Outcomes

The candidate will be able to:

- a) Identify and evaluate sources of data needed for pricing and underwriting including the quality, appropriateness, and limitations of each data source
- b) Identify and evaluate the rating parameters needed to evaluate and manage a book-of-business
- c) Develop experience analysis (claims cost and expenses)
 - i) Construct the appropriate models
 - ii) Develop the appropriate assumption, including trend, anti-selection, etc.
- d) Recommend appropriate actions following the study including
 - i) Areas for further study
 - ii) Changes in coverage, eligibility requirements or funding strategy
- e) Evaluate the impact of changing economic conditions on pricing
- f) Evaluate provider compensation model, including capitation, and its impact on projected claim costs.
- g) Integrate utilization management data into pricing
- h) Modify manual rates to reflect specific plan values including benefits for which little or no data is available
- i) Construct a rating model to be used for rating individual customers or plan designs

- Group Insurance, (Candidates may use the Fourth or Fifth Edition), Bluhm, W.F.
 - o Ch. 27, Estimating Claim Costs for Life Benefits, Fourth Edition, Ch. 29, Fifth Edition
 - o Ch. 28, Estimating Medical Claim Costs, Fourth Edition, Ch. 20 Fifth Edition
 - o Ch. 29, Estimating Claim Costs for Disability Benefits, Fourth Edition, Ch. 31, Fifth Edition
 - o Ch. 30, Estimating Dental Claim Costs, Fourth Edition, Ch. 32, Fifth Edition
 - o Ch. 32, Calculating Gross Premiums, Fourth Edition, Ch. 34, Fifth Edition
 - o Ch. 34 Medical Claim Cost Trend Analysis, Fourth Edition, Ch. 36, Fifth Edition
 - o Ch. 36 Applied Statistics, Fourth Edition, Ch. 38, Fifth Edition
 - o Ch. 37, Data Sources and Structures, Fourth Edition, Ch. 39, Fifth Edition
 - o Ch. 44, Management of Provider Networks, Fourth Edition, Ch. 46, Fifth Edition
- Individual Health Insurance, O'Grady F.T.
 - o Ch. 4, Individual Health Insurance Premiums
- Managed Health Care Handbook, (Fourth Edition), Kongstvedt, P.R.
 - Ch. 51, Actuarial Services in an Integrated Delivery System
- GH-D101-07 (Formerly 8G-600-00): Group Disability Insurance (sections 2, 4 and 7 only)
- GH-D102-07: Group Life Insurance, Section 6
- GH-D103-07: Pricing Long-Term Care pp.9–34
- GH-D104-07: Pricing Medicare Supplement Benefits, Sections IV & V
- GH-D112-07 (Formerly 8GM-202-00): Monitoring and Projecting Pricing Trends in a Managed Care Environment
- GH-D113-07: Group Long Term Disability Improving Actuarial Analysis through Understanding the Benefits Process
- GH-D114-07 (Formerly 8M-601-05): Actuarial Issues in Fee-For-Service/Prepaid Medical Group, Sutton & Sorbo
- Paper 7: A Comparative Analysis of Chronic and Non-Chronic Insured Commercial Member Cost Trends,
 Bachler/Duncan/Juster http://www.soa.org/research/files/pdf/Paper7_Duncan%20Paper_FINAL.pdf

Exam	Group/Health Design & Pricing
Learning Objectives	

11. Understands and applies the concept of credibility theory-

Learning Outcomes

- a) Describe basic approaches to credibility theory
- b) Choose the appropriate theory to be used in a given situation
- c) Apply the theory to a given situation

- GH-D115-07 (Formerly 8GM-207-00): An Examination of Credibility Concepts
- Show Me the Utility: Practical Applications of Credibility, RSA -28, Vol-2
 http://www.soa.org/library/proceedings/record-of-the-society-of-actuaries/2000-09/2002/january/rsa02v28n242pd.pdf
- An Empirical Approach to the Determination of Credibility Factors, TSA XXI,1 http://www.soa.org/library/research/transactions-of-society-of-actuaries/1969/january/tsa69v21pt1n59ab2.pdf
- Comparing Credibility Estimates of Health Insurance Claims Costs., NAAJ, Vol 9, #1
 http://www.soa.org/library/journals/north-american-actuarial-journal/2005/january/naaj0501-1.pdf
- Credibility Theory for the Health Actuary: The Need for an Inter-Company Experience Study, *Health Section News*, 4/2000, pg 6-9. http://www.soa.org/library/newsletters/health-section-news/2000/april/hsn0004.pdf
- Credibility The Health Actuary's Nemesis or Friend? *Health Section News*, June 1998, p. 1,2, 7, 8 http://www.soa.org/library/newsletters/health-section-news/1998/june/hsn9806.pdf

Exam	Group/Health Design & Pricing
Learning Objectives	
12. Applies principles of pricing, benefit design and funding to an underwriting situation	

Learning Outcomes

The candidate will be able to:

- Understand the risks and opportunities associated with a given coverage, eligibility requirement or funding mechanism
- b) Evaluates the criteria for classifying risks
- c) Recommends strategies for minimizing or properly pricing for risks

- Group Insurance, (Candidates may use the Fourth or Fifth Edition), Bluhm, W.F.
- o Ch. 22, Underwriting Large Groups, Fourth Edition, Ch. 24, Fifth Edition
- o Ch. 23, Underwriting Small Groups, Fourth Edition, Ch. 25, Fifth Edition
- Ch. 33, Experience Rating and Funding Methods, Fourth Edition, Ch. 35 Fifth Edition
- Ch. 40, Underwriting Gain and Loss Cycles, Fourth Edition, Ch. 42, Fifth Edition
- o Ch. 42, Product Development, Fourth Edition, Ch. 44, Fifth Edition
- Individual Health Insurance, O'Grady, F.T.
- o Ch. 6 Underwriting Individual Health Insurance
- Managed Health Care Handbook, (Fourth Edition), Kongstvedt, P.R.
- o Ch. 49, Underwriting and Rating Functions Common to Most Markets
- o Ch. 50, Underwriting and Rating Functions by Market
- GH-D101-07 (Formerly 8G-600-00): Group Disability Insurance (section 6 only)
- GH-D102-07: Group Life Insurance, Sections 5 & 7
- GH-D104-07: Pricing Medicare Supplement Benefits, Section VI
- GH-D109-07: Medical Underwriting: Approaches and Regulatory Restrictions (Shreve-Milliman Research Report)
- GH-D116-07: (Formerly 8GM-209-02): Economic Incentives in the Sale and Use of Health Insurance
- GH-D117-07 (Formerly 8GM-206-00): Variation by Duration in Small Group Medical Insurance Claims
- Optimal Small Group Renewal Methods, Health Section News, 8/2005, pg 12-15,23 http://www.soa.org/library/newsletters/health-section-news/2005/august/hsn0508.pdf
 Cumulative Anti-Selection Theory, TSA XXXIV http://www.soa.org/library/research/transactions-of-society-of-actuaries/1982/january/tsa82v3411.pdf