



SOCIETY OF ACTUARIES

Article from:

# Product Development News

August 2000 – Issue No. 50

## *How Ready Are You for the Critical Illness Challenge?*

Sometime soon, your company may ask you to develop a critical illness insurance product. Are you ready to respond? Test your knowledge by answering the following ten challenge questions in the quiz below:

***Q1: Critical Illness Insurance pays on:***

A: Death due to a specified illness

B: Diagnosis of a specified illness

***Q2: Critical Illness incidence rates for insured lives cannot be determined with confidence because we have insufficient insured experience.***

A: False

B: True

***Q3: SEER Studies reflect cancer rates as a fraction of:***

A: Applicable population segments

B: Applicable population segments with existing sufferers eliminated

***Q4: The American Heart Association obtains its heart attack incidence information from:***

A: The Framingham Study

B: Consulting Physician's reports

C: The Centers for Disease Control

***Q5: Thomas Royle Dawber was a celebrated researcher employed in:***

A: The SEER Studies Program

B: The Framingham Cohort Studies

C: The United Network for Organ Sharing

***Q6: Select period Critical Illness Rates cannot be reliably estimated because Critical Illness is a new product and insufficient select period experience is available***

A: True

B: False

**Q7: Substandard applicants cannot be accepted as Critical Illness Insurance Risks**

A: True

B: False

**Q8: Critical Illness Underwriting is most closely related to underwriting for:**

A: Health Insurance

B: Disability Insurance

C: Life Insurance

**Q9: The Formula**

$$i'_x = i_x \frac{w'_x k'_x q'_x}{w_x k_x q_x}$$

*is used by Critical Illness actuaries as:*

A: An exposed to risk measure

B: An underwriting calibration tool

C: A tool for calculating costs of Critical Illness riders

**Q10: The Formula**

$$(aq)_x = i_x + (1 - k_x q_x)$$

*is used by Critical Illness actuaries:*

A: To calculate rates for life policies with Critical Illness Riders

B: As an underwriting calibration tool

C: To calculate rates for stand-alone Critical Illness Policies

Check your answers against the answers provided below. Score 1 Grade Point for each correct answer.

Score:

Passing Grade is 8 or better.

Answers:

Q1: B Q2: A Q3: A Q4: A Q5: B Q6: B Q7: B Q8: C Q9: B Q10: A

Johan Lotter produced the quiz. He is a consulting actuary and president of Lotter Actuarial Partners Inc. in New York. Additional information about Critical Illness can be found at his company's Web site, [lotteract.com](http://lotteract.com). He can be reached at [lotteract@earthlink.net](mailto:lotteract@earthlink.net).