The Actuary

November 1980 – Volume 14, No. 9

CANCER INSURANCE = TODAY'S WHIPPING BOY

by E. Paul Barnhart

Cancer Insurance is among the latest products singled out for assault. Consumer advocates, Congressional committees, Federal agencies, State insurance departments: all have had their well-publicized say. Some of the last-named have wielded the executioner's axe, prohibiting its issue.

The product is usually found wanting on three counts:

(1) Incomplete coverage. Only one cause of loss is insured: comparable to auto insurance covering only collisions with cars colored red. And if expense for treatment is incurred, benefits are scheduled and limited.

(2) The "loss ratio." The benefit return in relation to the premium is too low: 40%, 30%, or even less.

(3) Scare tactics. The product is huckstered by unscrupulous salesmen preying upon a weak and gullible public.

Rebuttals to These

(1) It would be wonderful if all of us could enjoy adequate insurance protection against every economic hazard. But we can't afford that, or else we can't be persuaded to allocate enough of our discretionary spending money to that worthy end. Cancer insurance is mostly sold as an inexpensive non-underwritten supplement to basic health insurance, group or individual, that presumably already protects the buyer against general hospital and medical expenses.

Furthermore, at least four other types of insurance serve a supplementary purpose similar to that of cancer insurance, i.e., (1) major medical insurance, (2) hospital daily indemnity insurance, (3) catastrophe expense insurance, (4) accident policies. Of these, the first and third are getting hard to find, the second is relatively limited, and the fourth is open to the same criticism as cancer insurance.

The public's choices seem to be: (a) Spend a lot for supplemental coverage adequate for any need; (b) Spend less for limited, inadequate supplemental coverage, but against any loss; (c) Spend perhaps still less on economically useful protection against selected losses that worry the buyer; (d) Buy no supplementary protection at all. Our paternal protectors evidently opt for (a) or (d) only, and if too many of us choose (d) they will seek to have supposedly adequate coverage provided for us, under government mandate where, like it or not, or even know it or not, we shall all indeed pay for it.

(2) The "loss ratio" question is a more legitimate ground for argument, if that test is intelligently applied. But the nature of the loss ratio pattern needs to be understood. It tends to be select and to mature slowly toward its ultimate level. I often worry that the loss ratio on cancer plans that I analyze for clients (both sellers and buyers) will get so high that the premium will ultimately prove deficient. Regulators looking at early returns often fail to appreciate where the trend is headed.

And also, what really is a fair benefit return for a product that is individually sold, whose premium is low, and that entails a comparatively high risk, i.e., a large potential benefit of low* expected frequency? For a product of this kind, many states realistically recognize that a loss ratio benchmark at perhaps 30% or 40%, rather than the commonly favored 50%, is reasonable. What is the usual loss ratio on short-term life insurance, or accidental death insurance, or the travel insurance sold at the airport booth? Insurance products cannot always be fairly measured against the 90% loss ratios typical of large self-administered employer-paid group insurance. Yet that's what ignorant consumer advocates and too many legislative committees do.

(3) How legitimate, after all, is the criticism of "scare tactics" if the product itself is legitimate? We've all heard about insurance, sold by the high-pressure agent originally, which was deeply appreciated later when it was there and needed. Many products are sold by scare tactics — cosmetics, burglary alarms, American Express traveler's checks (What will you *do?* What *will* you do?). Certainly there's a limit somewhere, but the question has more to do with particular companies and agents than with products generically.

The Product's Merits

Are all the millions who've bought cancer insurance victims of scare-tactic salesmen selling worthless contracts? I think not. As long as a particular cancer policy meets three criteria, reasonably applied, namely,

Real economic value against the loss insured;

Fair economic value, comparing expected benefit to price;

Honest representation of what the plan will pay and for what price, even if the salesman adds a dose of scare;

I find no grounds for objecting to it. □

*except at high ages, particularly among men.

THE WILSON REPORT

Ed. Note: A committee, chaired by former Prime Minister Sir Harold Wilson, has made public its findings after a three-year study of the functioning of British financial institutions, and their value to the economy. This article, written from (i) material generously supplied by a London actuary, and (ii) an article in the June 28th issue of The Economist, *attempts no more than to alert readers to five of the Report's topics that are of special interest to actuaries.*

It seems that the Society would do well to find out whether eithter or both of the two F.I.A.'s who were among the architects of the Report—Messrs. Gordon V. Bayley and Peter G. Moore—might be persuaded to speak at one of our meetings about this Report and its implications for actuaries.

(1) Life companies and pension funds in Great Britain have increased their assets ten-fold during the past twenty years. These and other institutions now own more than half the shares on the London Stock Exchange. They are labelled as timid investors, inclined thus to neglect the needs of small, new, innovative enterprises.

(2) The Report lists general arguments for and against issuing index-linked securities and mortgages, and recounts the experiences of other countries (including France and Finland where such experiments are reported to have failed). The Committee favors experimentation with index-linked securities and proposes that average earnings be the index adopted.

(3) The Committee does not favor creating the equivalent of the U.S.A.'s Security and Exchange Commission as a regulatory body. Instead it proposes a review body—what *The Economist* calls "an SEC without teeth."

(*Continued on page* 7)

Dog Life Insurance

(*Continued from page 1*)

(Farming Insurance Company), a mutual company organized in 1890 that has written this coverage since 1923. The facts for this article were generously given me by Mr. Arne Magnuson, a company officer and indeed a hospitable gentleman.

For many years this company's dog insurance was a small portfolio with unfavorable loss ratios. But since redesigning their coverage, they have reaped 20% of their premium income from it, and results have been satisfactory.

Coverage

Protection consists of a package of life insurance and veterinary care coverage, available after the dog reaches 6 weeks of age. After the dog is 7 years old, there is a reduction each year of 20% of the amount insured (but not below $250), and the coverage terminates after the dog's 10th birthday. All types of disease and injury are covered, injury after the first day and illness after 30 days. Compensation is payable at full sum insured when the dog dies or becomes so ill or injured that it must be destroyed, or when it goes astray. A lower amount is payable when injury or illness has lastingly reduced the dog's value for breeding purposes.

One unusual feature is that in lieu of cash payment the company may give the owner a new dog of the same value as the insured animal.

Veterinary care is paid for costs of examinations, treatment and care of sick or injured dogs subject to a deductible of 1% of base amount for each treatment period of 60 days. For 1978 the base amount set by the National Insurance Act was 13,100 Swedish kroners ($3,200). Fees are limited to those set by the Swedish Veterinary Society.

Safeguarding Provisions

Coverage is not effective in event of gross negligence or cruelty by those in charge of the animal. If information provided at time of application is incorrect, the insurance is subject to reduction or cancellation. Payment on a claim for the dog having gone astray is deferred 3 months.

Data

The company keeps statistics by type of dog and by cause of claim. Veterinary care experience shows that dogs bred for performance-oriented characteristics enjoy better health than those bred for aesthetic characteristics, but the claims due to accidents show just the reverse.

A Question for Canada and the U.S.A.

Could dog insurance be successfully transacted here by following the Swedish model? We do not have a national licensing of veterinarians on whom a successful claim administration would depend. As the market for such coverage would be on registered dogs, development of dog insurance presumably should come through organizations of registered dog owners. ☐

ACTUARIAL NOTATION— IAN, LAN & CAN

A Study Group of the Institute and the Faculty of Actuaries, chaired by David E. Purchase, has just distributed an account of its work, of which the following is, one might say, a synopsis of a synopsis. Any interested actuary may request a copy of the full report from the headquarters of either the Institute or the Faculty.

IAN is the symbol for the present International Actuarial Notation which has existed with very little change since the end of the 19th Century. Over the last 20 years or so, growing dissatisfaction has been expressed with the IAN, albeit from only a minority of actuaries. Among the major reasons for this is the incompatibility of IAN with computer use.

LAN stands for Linear Actuarial Notation, the word Linear meaning the expunging of all the prefixes and suffixes, half a line up or down, on which generations of us have cut our eye-teeth. In addition to linearity, a basic feature of LAN is that its character set (its range of symbols) conform to the restricted range that computers normally permit. The Study Group also set out to construct a LAN that, unlike some previous proposals, would be easily recognizable to the majority of actuaries.

CAN means Computable Actuarial Notation. This is a set of symbols that only actuaries who work directly with computers will need to use, or indeed be able to read. Its essential, as seen by the Study Group, is that LAN be translatable into CAN by a purely automatic, routine process.

The Study Group has evolved notations designed to accomplish the above and other objectives, but emphasizes that the development of its notations is far from complete, and in no sense are they put forward as formal proposals for recommendations for change. The Study Group would, though, like to see its notations used in practical situations so that they can be refined and extended as a result of experience rather than theory. The Group hopes also to make available, in due course, a set of User Notes for actuaries who help the project along by carrying out experiments with LAN and, particularly, CAN.

In a follow-up article we will describe the Study Group's LAN in more detail.

E.J.M.

Wilson Report

(*Continued from page 6*)

(4) Pension funds, says the Committee, should be required to make full regular disclosure to their members, including the results of the latest actuarial valuation. Thought was given to proposing some movement away from advance-funded to pay-as-you-go funds in view of the enormous assets and resulting economic impact of the former; but no such recommendation emerged. The view was expressed that the chief anomaly in private pensions is the freedom from tax that lump-sum benefits at retirement enjoy.

(5) The Committee recommended that the traditional tax relief given buyers for payment of life insurance premiums—a significant aid to selling policies with savings elements—be extended to some other forms of saving, even if this necessitates scaling down the size of the tax break given to life insurance premiums.

E.J.M.

Scoring Multiple-Choice Actuarial Examinations

The multiple choice examinations have created their own problems in scoring the answers to the questions. How the mystery, if any, is solved is the subject of the Supplement to this issue for which we are indebted to Messrs. Radcliffe and Nicodemus. ☐