EXAMINATION

September 2005

Subject SA1 — Health and Care Specialist Applications

EXAMINERS' REPORT

Introduction

The attached subject report has been written by the Principal Examiner with the aim of helping candidates. The questions and comments are based around Core Reading as the interpretation of the syllabus to which the examiners are working. They have however given credit for any alternative approach or interpretation which they consider to be reasonable.

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Chairman of the Board of Examiners

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1 (i) Bank customers include mortgage customers, individuals deposit holders, small businesses. IP and CI products could meet following needs:

To meet specific needs
Repay loans
CI lump sum
IP meet repayments
Replace income - IP
Key person cover
Compensation for loss of profits
To pay for a replacement

To provide cash
CI lump sum
More than cost of immediate concern
CI provides cash to repay loans whilst p/holder is still alive
For a change in lifestyle
IP income stream
Proportional benefit if part time work

To allay fears
Provide financial comfort
Help prevent financial hardship for dependents
Pay for domestic help

To pay for medical fees

Other
Home modification
Recuperation benefits
For employers, as an employee benefit, to attract staff
For employers, limit own payouts on ill-health
Partnership dissolution on CI

(ii) **Reinsurance arrangements**
Insurer looking to limit its exposure to adverse fluctuations in experience
Shareholders require stable results
Probably use quota share on original terms
Written under treaty on an obligatory basis
An experience refund to manage the claims experience better
Portfolio stop loss/catastrophe reinsurance

Other practical assistance
Assistance with product design and marketing strategy
Assistance with setting the premium rates - lack of previous experience - set using risk rates loaded up to allow for insurer's cost of capital, expenses and profit.
Staff training
Systems and policy documentation

Medical underwriting
Claims
Market information
Financing
Access to market research
Low retention initially, then build up
Possible tax advantages

(iii) **Badging**

Advantages

- Benefit from professionals expertise in all areas
- Particularly relevant for IP claims
- Medical underwriting expertise
- No current experience so can benefit from all of this
- Historically poor income protection experience
- Potentially cheaper for them to do than the insurer
- Can concentrate on distribution
- Can be a speedier installation than own product or subsidiary
- Additional profit sharing
- Cross-selling of life products, may be bank products to H&C insurer

Disadvantages

- Lack of synergies with internal operating procedures
- Linking to the 3rd party systems etc
- Loss of control over policy process and claims administration with possible resulting reputational risk
- May be less profitable in long run
- Loss of economies of scale
- Skill needed in drafting service level agreements, other contract issues
- No involvement means no expertise derived - difficult to reclaim longer term
- Loss of link between sales staff and u/w
- Actuarial control cycle more difficult to apply
- Counterparty risk

(iv) Investigations for pricing own product business include:

Morbidity / Mortality

Analysis of the company's experience over a 3-5 year period
Long enough to have reliable data and short enough to be homogeneous
Stand-alone, acc
Make allowance for any changes in underwriting standards

In addition, and particularly if the company has insufficient data
Industry data (such as CMI reports in the UK)
Data from reinsurer
Published tables

Published data will probably need adjustment for the particular circumstances of the company and its products.

Need to consider trends in experience especially for morbidity

For critical illness, would reconsider illnesses and conditions covered.
If sufficient data may analyse by specific disease.

For income protection, consider claims inceptions
and claim terminations experience
Look at partial recoveries

Claims data would be subdivided as follows :

- Age at inception
- Sex
- Smoker status

If sufficient data, may analyse by:

- Current age (or elapsed duration of policy)
- Duration of claim
- Policy term
- Deferred period
- Occupational group
- Ratio of benefit to income
- Type of sickness and injury
- Date of termination of claim
- Reason for termination of claim
- Sales channel
- Geographic location

Because of doubts over morbidity rates the company is likely to reassure a larger proportion of this business.

Rates included in reassurance terms would probably be followed.
AIDS projections are available, but only as industry-wide data.

Data needs to be interpreted with care. Deaths from critical illnesses covered will be irrelevant, because a claim will already have been paid. Other deaths release reserves as no benefit is paid. This is a different situation from the type of policy the data were collected from.
Assess credibility of data in each cell and group accordingly
Exposure and claims data must be collected and subdivided consistently.

Comparison of the proposed target market and that in the data is important

Almost certainly likely to use the experience to generate an adjustment to a standard table.

Investment returns
This should reflect the expected return on the underlying investments

Expenses
The company should have an analysis of expenses over recent years.

A series of analysis helps to identify trends to use in assessing future rates.

Expenses should be split into acquisition, maintenance and claims, and between contract types. For income protection, the expenses may also be split between claims inception and claims maintenance. The level of detail will depend on the size of the company.

Need to allow for any specific one-off costs and any expected additional costs (e.g. regulations).

Expenses might also be analysed into those which are contract size related and those that are policy related.

If the company's expense investigation does not provide credible data down to the particular contract type, broader averages may have to be adjusted.

Probably with input from reassurers.

Inflation needs to be allowed for from the date of investigation up to the date the rates will be used and allowance made for any expected trends in future inflation assumptions.
Launch expenses

Commission
The rates and structure that the company intends to pay can be loaded directly into the basis.

Expense inflation
National data on inflation of prices and earnings.
Expected future rates of inflation - possibly measured by the difference in returns on government fixed interest and index-linked securities.
The expense inflation rate will be chosen to be consistent with the investment return assumption.

Withdrawals
The company should have an analysis of experience available relating either to this contract or to broadly similar contracts.
Limited industry aggregate data may be available but will have to be adjusted to meet the particular contract and target market
The analysis may need to be adjusted because it has been affected by unusual economic circumstances over the period the data were collected.
Adjustments may also be needed if the intended target market or sales channel are different from those in the data analysed.
Analyse lapses by duration, product, sum assured, age, sex

Tax
Suitable assumptions will need to be made taking into account the company's current and future tax position.

Profit
Risk discount rate / profit criteria set according to the company's requirements.
Wider margin for risk as first time and inherently more risky than life and investment

Market Rates
Analysis would also be made with competitors products and rates.

Other
Mix of business
Margins in rates generally

(v) Actuary needs to understand how the with-profit distribution operates in the company under consideration

Do any health and care products share in the distribution; if so, how? In a UK context, this is very unlikely.
To what extent do the with-profit policyholders share in the profits of the health and care operation?
The actuary will be particularly careful where the size of the health and care book is significant in its contribution to distributional surplus

Policyholders Reasonable Expectations - Profits from a health and care operation do not emerge on a smooth basis; the actuary should be cautious in promulgating any profit expectations from the health and care area.

Smoothing - The distribution of any surpluses from the health and care operation will be volatile; the actuary will determine such profit as does emerge on a smoothed cautious basis.

Reversionary or terminal - Any profits arising from the health and care operation are likely to be small in relation to other component parts of the insurance business. The impact on bonus distribution will therefore be less significant and may be only a small addition to the bonus rate. It is usually perceived that terminal bonus is used to take up the slack from more volatile past contributions to surplus when allocated to a class of maturing policies. This might be the case with the none-too-regular profits from health and care insurance but their relative size would normally suggest distribution on a reversionary basis.

With-profit guide
Principles and practice of financial management (PPFM)
Treating customers fairly (TCF)

(vi) *Advantages*

- Some claimants should return to work sooner
- Should improve claims terminations
- Claims notified during deferred period may also return to work sooner
- Improving claims inceptions
- May also discourage borderline claimants from claiming
- Could provide positive PR for company

Disadvantages

Professionals are expensive

- Average benefit levels may be low and so the benefits of doing this may not be worthwhile doing
- May be seen as trying to say no to valid claims
- Note these are customers of the bank
- Health professionals, if not employed directly, may advise people to stay off work who would otherwise have returned to work

In general, only worthwhile for large claims due to the expenses

(vii) Products price too high so only attracting those customers who would be rated by other companies
Medical underwriting standards may be worse than competitors
Financial underwriting standards may be worse than competitors
Claims admissions rules more generous than average
Non-identification of fraud/non-disclosure
Claims management - less active than average
The replacement ratio (benefit relative to income) may be higher than average – less incentive to return to work.
Customer segment poor
Policy design encouraging anti-selection e.g. high replacement ratio
Weak disability definition
Pricing wrong - e.g. no occupational rating
Distribution channel - anti selection high risk for IFAs
Inflation higher than allowed for in the premium rates.
Economic factors may have led to higher claims
Threat of redundancies
Directors information could be wrong
Random fluctuation
Over conservative reserving
Concentration of risk
Medical advances may prolong claim (instead of death)
Change in attitude to claim
Anti-selective lapses

2 (i) May be part of a reduction in volume of all individual PMI business sold
May be overall intermediary market reduction
or may be a reduction in market share

Reduction in volume of all individual PMI business sold
Overall number of PMI purchasers has reduced
(Overall market size in premium terms has increased, fuelled by premium inflation)
Market premiums too high (premiums typically higher than for corporate schemes)
Reduced customer need (eg NHS improvements, reduction in waiting lists)
General improvement in welfare benefits
Economic climate, job insecurity
Possible changes in premium tax or tax on benefits

Overall intermediary market reduction
Alternative distribution channels may be substituting for intermediary business
Increase in regulation may deter intermediaries from selling
Intermediaries focused on corporate business (higher premiums and commissions)

Reduction in market share
New entrants into market
Premiums too high relative to competitors
Benefits not competitive (eg competitor product design may have moved forwards)
Commission levels uncompetitive (eg competitor levels may have increased)
Difficult to do business with
Late payment of commission
Arduous process for intermediary (eg for quotation)

Poor company reputation relative to rest of market
Perception of poor customer service
Perception of reduction in credit rating
Perception of strict claims philosophy (high profile non-payment of claims)
Poor relationship between intermediaries and other parts of the company
Other product types deemed to be better value

(ii) Normally assess in yearly cohorts
But may undertake quarterly for up to date position
- Check costs by provider (for heavy chargers)
- Check preferred providers, service level agreements
- Changes in practices at u/w, claims stages
- Changes in distribution methods
- Changes in terms and conditions

Key indices are:
Rate of claims incidence
- No of claims / exposed to risk
- Split by procedure/benefit types
- Compare actual v expected

Split by occupation or other rating factors
Check cost of 'family' claims against assumptions
Average cost per claim
Total incurred claims / no of separate claims
Claims expenses
Loss ratio
Total incurred cost of claims / relevant earned premium
Calculated for cohort of business under review
Consider cohort by duration in light of selection effect
But depends on type/extent of medical underwriting at outset
Incurred claims includes:
Claims paid to date
Reported but not paid
Incurred but not reported

Additional claims factors which might be considered if claims analysis were to be used as part of a pricing calculation might include:
Trends in costs of procedures, drugs and dressings
Overall private hospital capacity, current and projected
Competitors' rates movements where these are caused by their own claims experience

(iii) Use data from other sources
Professional/governmental bodies
Other countries
Reinsurers

Own claims data is likely to be more relevant but may not be available as this is a new product
Implement benefit caps to limit claims per case and hence maximum liability
Benchmark premiums against any similar plans already in the market
Build margins into pricing and reserving to reflect the uncertainty
Avoid guarantees, both for premium and benefit
Write product on a short-term basis without guaranteed renewability
Reinsure appropriately to limit retained risk
Ensure adequate capital is in place to meet uncertain claims outgo
Collect relevant data from policies written to accumulate own experience as quickly as possible
Delay product launch until better data is available
Tight benefit conditions
Claims preauthorisation
Monitor claims experience
Excesses
Preferred provider acupuncturists
Do not adopt the plan
Introduce NCDs
Offer cash benefit, not indemnity

(iv) **Legality**

Difficulties in worsening the terms of contracts
Guaranteed renewability. Customers have the right to renew.
Exact legal implications will depend on the wording of the contracts
Expect greater difficulty for long-term contracts
Regulator's approach/views

Market perception

Need care that approach is not out of line with market.
May be a strong competitive disadvantage
Strong reputational risk
Especially if in-force claims are denied which would previous have been paid
Changes are likely to need to be significant to have a really material impact

Projected volumes

Need to consider the positive volume impact of reduced premium
Against the potential negative impact of market perception, PRE
Both on new business and retention
All will be based on assumptions with little data to support
What are competitors already doing and how will they react?
Selective lapses

PRE/Treating customers fairly

Difficult to gauge for short-term policy
Depends on policy wordings
And strength of sales message at point of sale
Implications if approach has changed significantly from point of sale message

Administration

Would need to be able to run two claims processes in parallel
"Before renewal" approach and "Post renewal" approach
Likely to result in practical difficulties
Will add to costs of processing
May be contamination of old and new approaches
Problem is less acute than for long-term policies where many cohorts of business may apply
IFA training

Reinsurance

Changes to the treatment of existing business will need to be discussed with the reinsurer

(v) Currently a Moratorium on genetic testing until 2006
Not allowed to used genetic testing in determining
Availability of insurance
or Terms of insurance

Disability Discrimination Act 1995

May decline or impose special terms
But must be based on information or data relevant to the assessment of the risk

Anti selection

Individuals may have information not available to insurers
Particularly with moratorium in place
More likely to insure
Change claims frequency of portfolio
Or may insure for more on average
Increase average cost of claim

Lack of affordability

Premiums might be loaded for extra risk
But for some disorders premiums might be unaffordable
Individuals may become uninsurable
More common to exclude certain conditions within PMI context

Availability and cheapness of tests

If tests become sufficiently cheap may enable much better targeting of premium to risk
Could use in the underwriting process
Depends on the costs saved in terms of claims cost against the cost of the tests

Impact on pricing

Anti selection likely to result in increased premiums

Other

For PMI, generally acute cases, so possibly little impact. However, may allow earlier diagnosis, which may mean treatment is cheaper
Relatively little impact on group cover.

END OF EXAMINERS' REPORT