

INSTITUTE AND FACULTY OF ACTUARIES

EXAMINERS' REPORT

April 2019 Examinations

Subject SP1 – Health and Care Specialist Principles

Introduction

The Examiners' Report is written by the Chief Examiner with the aim of helping candidates, both those who are sitting the examination for the first time and using past papers as a revision aid and also those who have previously failed the subject.

The Examiners are charged by Council with examining the published syllabus. The Examiners have access to the Core Reading, which is designed to interpret the syllabus, and will generally base questions around it but are not required to examine the content of Core Reading specifically or exclusively.

For numerical questions the Examiners' preferred approach to the solution is reproduced in this report; other valid approaches are given appropriate credit. For essay-style questions, particularly the open-ended questions in the later subjects, the report may contain more points than the Examiners will expect from a solution that scores full marks.

The report is written based on the legislative and regulatory context pertaining to the date that the examination was set. Candidates should take into account the possibility that circumstances may have changed if using these reports for revision.

Mike Hammer
Chair of the Board of Examiners
July 2019

A. General comments on the *aims of this subject and how it is marked*

1. The aim of the Health and Care Specialist Technical subject is to instil in successful candidates the ability to apply, in simple situations, the principles of actuarial planning and control needed in health and care matters on sound financial lines.
2. Candidates who approach the questions, especially the more substantial elements of each question, in a methodical and detailed manner were far more likely to satisfy the examiners and receive a pass in the subject. Candidates will gain few marks if they do not address the question asked but merely write around the topic of the question.
3. The mark allocation for each question part gives an indication of the relative length of answer or number of points to be made to gain full marks. The Examiners’ Report covers more points than would be expected to get full marks. This is so that alternative approaches to questions by different candidates can be accommodated.
4. It is often helpful to use subheadings when answering long part questions.

B. Comments on *student performance in this diet of the examination.*

The paper was a relatively straightforward one and well-prepared candidates scored well across most of the questions.

Questions that focussed on knowledge of the Core Reading were well answered by those who had prepared thoroughly. However, the paper included several part questions requiring wider thinking or application of core reading to specific circumstances, such as questions 2(ii), 3(iii) and 6. Students should recognise that these are generally the questions which differentiate those students with a good grasp and understanding of the subject.

It is pleasing to see many candidates providing their answers under subheadings, making them easier to follow and mark. This also helps show that they have applied their knowledge to the specific scenarios described.

The comments that follow the questions concentrate on areas where the candidates could have improved their performance. Candidates approaching the subject for the first time are advised to include these areas in their revision.

C. Pass Mark

The Pass Mark for this exam was 63.

Solutions Subject SP1

Q1

- (i) Provides insured with regular income during periods when the insured is unable to work due to illness or incapacity. [1]
- The policy may have a number of exclusions such that not all illnesses/injuries may be covered. [½]
- Policy is usually written as long term product. [½]
- Policy expiry normally linked to retirement e.g. 55, 60, 65 [½]
- But may be for a fixed term. [½]
- Regular premiums paid by insured. [½]
- Premium rates may be guaranteed or reviewable. [½]
- Premiums can be level or increasing in line with an index. [½]
- There can be multiple periods of sickness benefits paid during policy term. [½]
- Benefits can be level or increasing in line with an index. [½]
- Benefits could escalate differently in and out of claim. [½]
- Benefits limited to prevent over insurance.
- Limit based on a percentage of salary (gross or net of tax) at date of incapacity/replacement ratio. [½]
- Benefits may reduce or cease after a specified period. [½]
- Definitions of incapacity – may be occupational based [½]
-e.g. own occupation, any occupation [½]
- [One half mark awarded for any relevant example given, maximum 1/2]*
- Or activity based [½]
- Or wash himself, walk a distance, [½]
- [One half mark awarded for any relevant example given, maximum 1/2]*
- Deferred period before benefit payable [½]
-e.g. 13, 26 or 52 weeks [½]
- There may be a linked period. [½]
- There may be proportionate benefits payable. [½]
- There may be rehabilitation/counselling benefits. [½]
- There may be a waiver of premium whilst benefits are paid. [½]
- [Max 6]**

(ii)	Pre-existing conditions	[½]
	Alcohol abuse	[½]
	Drug abuse	[½]
	Self-inflicted injury	[½]
	War, terrorism, acts of violence, civil unrest	[½]
	Hazardous sports or past-times	[½]
	Criminal acts	[½]
	Failure to seek medical advice	[½]
	Failure to follow medical advice	[½]
	Aviation (other than commercial flights)	[½]
	HIV/AIDS	[½]
	Redundancy	[½]
	Unemployment	[½]
	Attempted suicide	[½]
	Early retirement	[½]
	Reluctance to return to work	[½]

[Max 3]

(iii) Aims

Underwriting aims to produce risk classification whereby the expected experience is in line with pricing assumptions

[½]

By

Medical underwriting – medical & family history	[½]
Lifestyle underwriting	[½]
Financial underwriting – avoid over insurance	[½]
Underwriting IP involves psychosocial factors – customer's attitude/behaviour to sickness.	[½]
Careful underwriting reduces anti-selection	[½]
And non-disclosure.	[½]
Aim to underwrite consistent with other insurers	[½]
Otherwise if weaker this increases the potential for anti-selection of poorer lives	[½]
Or if more stringent improves the quality of lives but there may be a negative impact on volumes.	[½]
To the extent possible, reduce underwriting to be less of a burden so attractive to customers and distributors.	[½]

Process

Would seek various information which may be used for rating purposes (e.g. age, location, employment). [½]

Would need to decide in advance which rating factors would be important in its underwriting approach [½]
For example from market data, what competitors do. [½]
Would also need to decide how to collect data the insurer will use for underwriting [½]
For example, from proposal forms, online. [½]
Initial underwriting may be done by computer or administration staff. [½]
Need to decide benefit levels for standard terms where no further medical evidence required. [½]
More difficult cases may require specialist underwriting or medical evidence. [½]
Need to decide benefit levels where additional medical evidence, supplementary questionnaires, blood tests, medical examinations required. [½]
There may be exclusions [½]
e.g. unemployment, retirement, redundancy. [½]
There may be minimum and maximum benefits per annum. [½]

Results of underwriting

Would need to decide treatment of unusual risks e.g. occupation types or medical conditions as a result of underwriting [½]
For example, rating applied to the premium, decision deferred. [½]
May reject the application as a result of underwriting. [½]
[Max 6]

- (iv) Underwriting simpler than for individual policies [½]
And there will be less detail for each life insured. [½]
Underwriting done principally at group level. [½]
Administration kept to a minimum. [½]
Free cover limit set. [½]
The level will depend on whether compulsory or voluntary [½]
Number of members, total salaries, take up proportions [½]
[1/2 mark per example, maximum 1 mark]
Based on industry, occupation, location [½]
[1/2 mark per example, maximum 1 mark]

All employees below this limit accepted without individual underwriting. [½]
Require “actively at work on day cover starts”. [½]
Waiting period before each new member can make a claim that is accepted. [½]
Cover usually based on a prescribed formula e.g. percentage of salary. [½]
Cover above free cover level will require individual underwriting. [½]
Special terms may apply to cover over free cover level. [½]

[Max 5]

[Total Max 20]

Most students demonstrated a good knowledge of an individual IP product and scored well in parts (i) and (ii).

For part (iii) many candidates' answers focused on the underwriting process with only the better candidates also considering the purpose of underwriting and the different types of underwriting e.g. health, financial, lifestyle.

In part (iv) the better candidates provided a good number of points on underwriting group IP mentioning areas such as a requirement to be actively at work on the day cover starts and the need for underwriting for cover above the free cover limit.

Q2

- (i) A number of model points will be chosen to represent the expected new business under the product. [½]
As this is an existing product, the profile of the existing business, modified to allow for any expected changes in future, can be used to obtain the model points [½]
And past experience can be used to derive the assumptions [½]
such as morbidity, mortality, expenses, lapses. [½]
- If there are any changes to the product design, the profile of any similar existing product combined with advice from the company's marketing department would be used. [½]
- The model could be deterministic or stochastic. [½]
- For each model point, cashflows on income and outgo will be projected forward [1]
to the end of the policy term. [½]
Typical elements of cashflow income will include:
- Premiums, interest on cashflows and reserves [½]
[Half mark for one example, maximum ½ mark]
- Typical elements of cashflow outgo will include:
- Claims, [½]
Expenses (initial, renewal, claim) [½]
Commission (initial, renewal) [½]
Contribution to reserves [½]
Contribution to capital requirements [½]
Tax [½]
[Half mark per example, maximum 1 mark]
- Allowance should be made for:

Decrements such as lapses	[½]
Premium holidays	[½]
Benefit level changes	[½]
Reinsurance, etc	[½]
The net projected cashflows will then be discounted at a rate of interest, the risk discount rate.	[½]
The risk discount rate may take into account the return required by the company	[½]
And the level of statistical risk attaching to the cashflows under the particular contract, i.e. their variation about the mean as represented by the cashflows themselves.	[½]
The premiums for the model point can then be set so as to produce the profit required by the company.	[½]
It is possible for the desired level of profitability to be reached in aggregate (scaled up for the expected new business mix and volume), without requiring every single model point to be profitable in its own right.	[½]
However, if certain model points are unprofitable, the aggregate profitability of the business is then exposed to changes in mix (as well as volume) of the contracts sold.	[½]
Once acceptable premiums have been determined for the model points, premiums for all contract variations can be determined.	[½]
The premiums produced need to be considered for marketability. This might lead to a reconsideration of:	[½]
The design of the product, so as either to remove features that increase the riskiness of the net cashflows, or to include features that will differentiate the product from those of competing companies	[½]
The distribution channel to be used, if that would permit either a revision of the assumptions to be used in the model, or a higher premium (or charges) to be used without loss of marketability	[½]
Whether to proceed with marketing the product.	[½]
The net cashflows in respect of the model points, appropriately scaled up for the expected new business under the product, will be incorporated into a model of the business of the whole company.	[½]
Sensitivity testing can be carried out to assess the sensitivity of profits to a change in the key assumptions.	[½]
The new premiums would be compared to the old premiums and adjusted the assumptions, if necessary.	[½]
[Max 6]	

- (ii) The insurer would need to assess whether there was any actual evidence to indicate that their product would be uncompetitive when directly compared with those of competitors. [½]
- There may be differences between our products and those of competitors [½]
e.g. their products provide less comprehensive cover [½]
Or different commission rates paid [½]
Or different markets targeted. [½]
- [Up to 1½ marks for any 3 sensible examples]*
- Or the insurer may have a unique selling proposition [½]
So cutting premiums may not be necessary to maintain or increase volumes. [½]
However, if the insurer is now the most expensive this might damage the insurer’s reputation. [½]
Margins are needed to allow for uncertainties in historical data and assumptions. [½]
In general the higher the level of uncertainty, the larger the size of margin is needed. [½]
- The insurer would need to consider the current levels of margins used in its pricing. [½]
- The CI business is an established block of business so the insurer’s historical data is likely to be credible. [½]
Similarly the experience investigations are likely to be robust and appropriate [½]
And modelling techniques and methodology would also be appropriate. [½]
Hence there may be little in the way of margins that can be reduced. [½]
Any statistical evidence that would indicate that the company had been holding excessive margins in the past that have ultimately been released would also suggest that margins could be reduced. [½]
If there have been some recently launched new products margins may have been appropriate in the past but if the business is now established lower levels of margins may be appropriate. [½]
- Reducing margins may not be in line with the insurer’s attitude to risk or risk appetite. [½]
- The level of risk mitigating measures such as reinsurance that would be undertaken would need to be considered. [½]
- The insurer would test the sensitivity of profits to changes in parameters. [½]
Higher level of margin would typically be needed on parameters that have a material impact on the product’s profitability [½]
So reducing these margins may reduce the overall profitability [½]
And lead to more volatile financial results for the product. [½]
However, the overall profit will depend on the volume sold multiplied by the profit per policy. [½]

Hence overall profitability might improve by cutting margins as long as the contract covers its marginal costs and enough contracts are sold. [½]

May be able to reduce profit margins [½]

But this may depend on factors such as shareholders required return. [½]

Reduced margins will decrease premiums [½]

And hence increase new business levels. [½]

This may give rise to administrative issues [½]

Or capital strain. [½]

The insurer would need to consider the size of its free assets or parental guarantee. [½]

The significance of the block of business under consideration. [½]

There may be lapse and re-entry from existing policyholders. [½]

If pricing margins are statutory requirements there may be little or no scope for reducing them. [½]

Similarly the insurer may have internal rules/guidelines on the requirement for and permissible levels of margins to be incorporated in pricing. [½]

There might be an impact on other products sold by the insurer which could reduce overall profitability if margins are reduced. [½]

[Max 6]

[Total Max 12]

Most students scored very well in part (i) giving a good range of points.

Part (ii) concerned reducing margins in the pricing assumptions. The better candidates scored well by discussing the implications of reducing margins rather than just discussing changing assumptions and other factors that would improve the price competitiveness of the product.

Few candidates mentioned points such as looking for any statistical evidence that would indicate that the company had been holding excessive margins in the past that have ultimately been released which would suggest that margins could be reduced or that margins may have been appropriate in the past for new business but if the business is now established lower levels of margins may be appropriate.

Few candidates also discussed the effects on profitability in any detail, such as the points that, the overall profit will depend on the volume sold multiplied by the profit per policy and that overall profitability might improve by cutting margins as long as the contract covers its marginal costs and enough contracts are sold.

Q3

- (i) Reasons why the insurer might follow this strategy are:
- Increase the profits of the business [1/2]
 - Diversification of product range [1/2]
 - Diversification of insurer risks [1/2]
 - Diversification of benefits relating to statutory capital requirements [1/2]
 - Improve its brand image as a health care insurer [1/2]
 - Increase its market share of healthcare insurance business [1/2]
 - Increase its business volumes [1/2]
 - Benefit from economies of scale, reduces fixed costs of the business [1/2]
 - On a per policy basis [1/2]
 - Synergies with other products (e.g. claims & underwriting) [1/2]
 - Follow other insurers who are introducing Income Protection products [1/2]
 - Sales of CI may be falling [1/2]
 - Or the CI market may be saturated whilst the IP market is not [1/2]
 - There may be increased demand for products from individuals [1/2]
 - From sales force/IFAs [1/2]
 - And, for group policies, from employers [1/2]
 - As a result of increased awareness of IP [1/2]
 - Or changes in benefits provided by the state [1/2]
 - Such as State disability benefits [1/2]
 - Or changes in taxation [1/2]
 - There may have been regulatory changes making IP more attractive for the insurer or CI less attractive [1/2]
 - Insurer is now comfortable with risks due to availability of data/data from reinsurers [1/2]
 - The insurer's risk appetite has changed [1/2]
 - More profitable than its other products [1/2]
 - Cross-selling opportunities [1/2]
 - Efficient use of spare capital [1/2]
 - There could be a gap in the market for income protection in the territory the insurer is launching the product in. [1/2]
 - Pricing for IP may be starting to increase in general in the market so a good time to enter the IP insurance cycle. [1/2]
- [Max 5]**
- (ii) One of the principal motivations is risk transfer. [1/2]
- This will depend on the risk appetite of company for volatility in IP claims experience. [1/2]
- Reinsurance can help the insurer to limit its exposure to risk. [1/2]
- There is uncertainty with future trends in claims experience, [1/2]
- IP business claims tends to be relatively volatile. [1/2]
- Generally where an insurer has fears of a claim or combination of claims that would materially (negatively) affect the shape of results within that business line, reinsurance will be considered. [1/2]

This may occur due to a single event (e.g. outbreak of insured disease)	[½]
And/or a concentration of risk by occupation, industry or location.	[½]
Reinsurance can help the insurer to avoid large single losses/take on large risks.	[½]
What is large to an insurer will depend on the size of the free assets available	[½]
And the size of the IP portfolio relative to the company as a whole.	[½]
Reinsurance can help the insurer to smooth results.	[½]
The principle whereby reinsurance covers the larger risks or accumulation of smaller risks above certain limits helps to achieve a smooth development of accounts year-on-year.	[½]
Reinsurance thus helps to reduce the variance of the insurer's expected disability or mortality experience relative to the mean.	[½]
Another principal motivation is the access to reinsurance services.	[½]
The insurer is adopting a strategy that will take it into new risk areas where it has little previous experience; the reinsurer can help with	[½]
product design	[½]
policy wording	[½]
rating of impaired lives	[½]
pricing data,	[½]
underwriting	[½]
and claims management.	[½]

[Credit given for up to 3 examples, maximum 1 ½ marks]

The insurer could use reinsurance until it builds up enough expertise after which it could significantly reduce the amount of profitable business ceded to reinsurance. [½]

The insurer may have insufficient capital backing and so may be reluctant to accept, or incapable of accepting, particular risks by sector or by volume. Reinsurance cover can assist in this situation. [½]

Reinsurance shares the risks from mix of business by occupational definition, deferred period, class of occupation [½]

And increases capacity to accept risks. [½]

Reinsurance can help the reinsurer to reduce its solvency / capital requirement, [½]

Particularly if the solvency level of the company is already low. [½]

Another motivation may be that the current reinsurance price is below the insurer's own cost. [½]

Buying reinsurance will thus improve the overall profitability. [½]

The insurer may be motivated by product partnering with the reinsurer. This is particularly the case if the insurer is to launch a new product with which it has little or no experience. [½]

The insurer could be motivated to take out reinsurance because of the financial assistance provided as part of the reinsurance arrangement [½]

e.g. reducing new business strain [½]

There may be benefits from tax and capital arbitrage [½]

The insurer can share risks from options on the IP business [½]

And guarantees. [½]
For group business reinsurance may allow free cover limit to be increased [½]
Or pricing to be more competitive. [½]

[Max 9]

- (iii) Price competition is normally the key factor; everything else being equal, the insurer should pick the reinsurer that offers the lowest in price. [½]

Insurer is likely prefer reinsurers with high credit rating. There may be a minimum credit rating of reinsurer that the insurer would find acceptable. [½]
This would also ensure the insurer does not have to hold to much capital in respect of reinsurer default risk. [½]

The reinsurer should have experience of IP business. [½]

.....In particular, have the following expertise that can be of assistance to insurer [½]

Underwriting expertise – help develop underwriting criteria, support for large cases [½]

Claims expertise [½]

Product development skills, knowledge of IP market, claims experience. [½]

How easy will it be for the reinsurer to provide any support required. [½]

Are the reinsurer’s systems compatible with the insurers (e.g. will the reinsurer be able to provide data in a suitable format and vice versa) [½]

Whether the insurer has an existing relationship with the reinsurer. It may be helpful if there is an existing relationship e.g. insurer reinsures other types of business with reinsurer. [½]

But the insurer may want to choose a reinsurer where the insurer has low credit exposure to the reinsurer to reduce the concentration of credit risk and operational risk to reinsurer. [½]

The availability of reinsurance from a reinsurer. [½]

Can the reinsurer can accept the volume of reinsurance business required by insurer. [½]

Capable of providing reinsurance cover for a reasonable period of time. [½]

Cover the range of business required e.g. guarantees and options, product terms [½]

Reinsurer able to provide the reinsurance structures required by insurer – risk premium, quota share, XoL [½]

The insurer may require financial assistance from the insurer, e.g. reinsurance commission [½]

The reputation of reinsurer for service, e.g. speedy underwriting decisions and claim decisions. [½]

- Arbitrage opportunities from the reinsurer [½]
- e.g. tax [½]
- capital/reserving. [½]
- Insurer may desire profit sharing facilities from reinsurer. [½]
- There may be a limit to the amount of business the insurer places with one reinsurer. [½]

[Max 5]

[Total Max 19]

In general candidates scored well on all three parts of this question, providing a wide range of reasons why the insurer may want to adopt the proposed business strategy and why it may wish to reinsure part of the IP business. Most candidates also provided a wide ranging list of factors the insurer would consider when selecting its reinsurers.

Q4

- (i) (a)
 - Illnesses or conditions of a non-degenerative nature [½]
 - Where a cure is a reasonable prospect. [½]
 - Acute illnesses are generally short term. [½]
- (i) (b)
 - Chronic illnesses are degenerative and/or generally incurable. [½]
 - The purpose of any treatment is palliative. [½]
 - Chronic illnesses are generally long term. [½]

[Max 2]
- (ii) Advantages
 - Meets a customer need [1]
 - Particularly if the alternative sources of funding treatment (e.g. state-run providers or direct paying private providers) are inadequate or have a poor reputation. [½]
 - Could be seen as a market innovator if no other insurers currently offer this. [½]
 - If other insurers already offer this then it may be necessary to offer it just to keep up with the competition. [½]
 - Possibly could allow a higher premium to be charged without a large increases in claims. [½]
 - Could generate higher volume of business [½]
 - Which could increase profitability if the risk has been correctly priced. [½]
 - Enable deals to be struck with health care providers to manage the patients’ conditions [½]

It can be difficult to distinguish between acute and chronic conditions (especially with new cures being developed); the need to do this is taken away. [1/2]

It removes the need to stop payments when a condition changes from acute to chronic, avoiding reputational damage. [1/2]

Disadvantages

Would lead to much higher claims than the policies with just acute conditions. [1/2]

Difficult to price correctly as the insurer is unlikely to have access to data in respect of the new risk. [1/2]

Would need to reconsider underwriting procedures. [1/2]

Does the insurer want the same mix of new business? [1/2]

The benefit may be attractive to customers but the expected claim cost may require a premium that is too high to be commercially attractive [1/2]

Or the State may already provide suitable treatments. [1/2]

Chronic conditions are long term [1/2]

And the amount of treatment that is required is subjective – no amount of treatment will cure. [1/2]

Patients with these conditions will not recover and are likely to get worse, so their expected claims will increase every year [1/2]

By more than policyholders with non-chronic conditions. [1/2]

Renewal premiums may need to be increased substantially year after year [1/2]

Could lead to unpopularity and reputational damage [1/2]

Unless the policies which cover chronic conditions are a separate cohort that is priced separately from other products. [1/2]

High risk of anti-selection by new policyholders (i.e. more new business application from people with existing chronic conditions). [1/2]

Risk of selective lapses by policyholders with no chronic conditions if their premiums are increased in order to cover the expected claims for chronic conditions. [1/2]

If the portfolio becomes weighted towards policyholders with chronic conditions then the book would have claims that are too high to manage. [1/2]

High risk of moral hazard for policyholders who have chronic conditions – they will claim for anything perceived to be a possible treatment for their condition. [1/2]

There may not be sufficient private providers of treatment for chronic conditions in the market

e.g. these conditions may be better treated by services in the community (home visits by doctors/nurses/physiotherapists etc.) rather than in hospitals [1/2]

And the system may not be set up to handle this for PMI – e.g. no payment mechanisms in place. [1/2]

Would lead to much higher volume of claims per policy which may require investment in additional claims handling resources (staff, administration systems, office space, claims-stage underwriting.) [1/2]

More risky and hence profits more volatile. [1/2]

Likely to need higher capital requirements.	[½]
There may be more onerous regulatory/compliance requirements.	[½]
May be harder to get reinsurance.	[½]
There may be overlap with insurers other products such as CI, LTCL.	[½]
There may be increased investment risk.	[½]
There may be more profitable uses for the company’s capital.	[½]

[Max 10]

[Total Max 12]

Part (i) was generally answered well by candidates.

For part (ii) few candidates discussed that an advantage is that it can be difficult to distinguish between acute and chronic conditions and the proposal would take away the need to do this or that it removes the need to stop payments when a condition changes from acute to chronic, avoiding reputational damage.

Under disadvantages few candidates discussed the effect on claims payments or the effects of potential selective lapsing in any detail.

Q5

(i) (a) Living costs

Food	[½]
Clothing	[½]
Heating	[½]
Amenities	[½]

[Maximum 1 mark for this part]

(b) Housing costs

Rent	[½]
Mortgage payments	[½]
Council tax	[½]

There are also referred to as the “hotel” or “accommodation” element of the total costs. [½]

[Maximum 1 mark for this part]

(c) Personal care

The additional costs of being looked after arising from frailty or disability.	[½]
Personal care includes all forms of care directly involving touching a person’s body, incorporating issues of intimacy, personal dignity and confidentiality.	[½]
This should be separated into nursing care and other forms of personal care.	[½]
Nursing care is the narrowest form of long term care and can be defined as care that requires the specific knowledge or skills of a qualified nurse.	[½]

[Maximum 1 mark for this part]

[Max 3]

(ii) (a)

Both products provide a guaranteed lifetime income . [1/2]

In both cases benefit payments may be level or increasing. [1/2]

Pre-funded product

Purchased by relatively healthy people to protect them against the risk of future disability. [1/2]

There are various methods of funding the insurance premiums, including:

Single payment [1/2]

Regular payments [1/2]

Restricted regular payments that either stop at a certain age; or [1/2]

during a defined level of disability (i.e. with a waiver of premium) [1/2]

Retrospective payment, e.g. from the sale of the home. [1/2]

[Maximum 1 mark for funding methods]

The benefit payment is dependent upon the claim definition, which may be triggered by a single or a multiple set of events. [1/2]

The single event may itself depend on a level of disability and its continuation for a specified period. [1/2]

Many of today's pre-funded long term care insurance products use activities of daily living (ADLs) [1/2]

And cognitive impairment as the claims trigger to measure dependency. [1/2]

Examples of ADLs are washing, dressing. [1/2]

The number of ADLs failed denotes the level of dependency, there may be a mental impairment trigger. [1/2]

[Maximum 3 marks for points relating specifically to Pre-funded product]

(b)

Immediate care product

Purchased by long term care claimants to protect them against the uncertain survival duration. [1/2]

On payment of a single premium payment. [1/2]

The premium is individually calculated based on health status. [1/2]

Unlike pre-funded plans, these have immediacy of need. For the consumer the insurance premium may help to determine the most appropriate nursing home. [1/2]

Some plans seek to protect the policyholder from future care cost escalation by pre-agreeing benefit escalation rates with a specified list of nursing homes. [1/2]

The policyholder can also select a death benefit. [1/2]

This could be structured as a minimum payment period, or by amortising the single premium. [1/2]

[Maximum 3 marks for points relating specifically to Immediate needs product]

[Max 4]

(iii) Insurer

Adverse selection costs – with such a small volume of current business in the market, the inability to spread the cost of high claims could pose a significant risk to the insurer. [1/2]

Limited profitability and market size - the potential costs of entering the market may outweigh the potential profits. [1/2]

Demand may be limited if state benefits are good [1/2]

Or the product is unattractive (e.g. customers want indemnity insure is offering fixed cash benefits) [1/2]

Or underwriting is onerous. [1/2]

It may be hard to reach the target market. [1/2]

Longevity and morbidity risk - there is significant uncertainty over the future of life expectancies and how trends in disability might be shaped in the future. [1/2]

Uncertainty over future claims patterns due to lack of data and past experience. [1/2]

Reputation risk - if benefits do not meet the needs of customers, or if inexperience leads to bad customer service [1/2]

There could be an adverse effect on sales for other products. [1/2]

Financial advisors' resistance - the product history may be tainted in the eyes of advisors making it difficult to sell through these channels. [1/2]

Claims assessments – there is the risk that providers of care may be incentivised to overstate needs knowing that the cost was being covered by an insurer. [1/2]

Development cost – development costs such as product development, pricing, marketing, IT and training underwriters to perform full claims underwriting would be a significant up-front cost. [1/2]

Capital management – ALM and capital requirements with such uncertainty could be inhibitive to entering the market. [1/2]

Consumer

Cost - many households may have great difficulty in affording the large single premiums on a LTCI contract, especially in the context of competing expenditure requirements. [1/2]

Alternative strategies - some households keep their savings or plan on using anticipated inheritance from older relatives or the value of their home in order to pay for the old age requirements. [1/2]

Lack of knowledge on the need for care arrangements - many do not realise the care system is not fully state supported. [1/2]

There may also be some ignorance as to the in-home care requirements some people will experience in their old age. [½]

The complexity of products and a distrust of insurance companies could discourage potential policyholders from buying this product. [½]

Consumers may prefer to have the freedom of choice on the care home they wish to use, rather than the ones offered by the insurer. [½]

Critical comments in the press, in line with comments made on previous LTCI products. [½]

[Max 5]

[Total Max 12]

Parts (i) and (ii) were generally answered well by most candidates.

In part (iii) only the better candidates discussed possible reasons why there might be a lack of demand for the product or the possible resistance from distributors to selling the product or the uncertainties involved in selling the product. Few candidates discussed customers’ potential lack of knowledge on the possible need for care and the costs of such care or the alternative strategies they maybe pursuing to provide for this.

Q6

- (i) (a)
- | | |
|--|-----|
| Generally classed as short term insurance | [½] |
| Can be individual or group versions | [½] |
| Annually renewable | [½] |
| Premiums are reviewed and may increase on renewal | [½] |
| Only covers acute conditions | [½] |
| Offered on an indemnity basis, possibly subject to limits | [½] |
| Covers hospital costs or day care operations | [½] |
| For in-patient treatment: | [½] |
| Accommodation | [½] |
| Nursing care | [½] |
| Operating theatre | [½] |
| Diagnostic procedures | [½] |
| Surgical dressings | [½] |
| Drugs | [½] |
| Specialist consultations and physiotherapy received as an inpatient. | [½] |
| Accommodation for one parent to stay in hospital with an insured dependant under 12 years old. | [½] |
| Specialist fees | [½] |
| Surgeons’ and anaesthetists’ fees for in-patient and day care operations and physicians’ fees for in-patient treatment | [½] |

[Maximum 3 ½ marks for in-patient treatments]

Out-patient treatment:	[½]
Specialist consultations	[½]
Diagnostic procedures such as radiology and pathology	[½]
Physiotherapy	[½]
Radiotherapy, chemotherapy and scanning	[½]

[Maximum 1 ½ marks for out-patient treatments]

Private Ambulance	[½]
Recuperative care, to include nursing and domestic services	[½]
Overseas cover	[½]
Cash payments for treatment received as an inpatient on a State healthcare funded basis	[½]
Certain conditions are usually excluded from PMI cover such as pre-existing conditions, pregnancy, cosmetic surgery	[½]
However, group policies may cover pre-existing conditions	[½]

[Max 6 marks in total for PMI]

(b)

A PMI product variant	[½]
Generally classified as short term insurance	[½]
But can be long-term with premium reviews.	[½]
Pays a lump sum when the policyholder undergoes surgery.	[½]
The size of the lump sum varies with the class or severity of the procedure.	[½]
It is estimated to be sufficient to cover the in-patient costs with a balance for incidentals and recuperation expenses.	[½]
There is no guarantee that the benefit will cover extreme surgical complications.	[½]
The advantage to the insurer lies in the simplicity of a fixed benefit schedule.	[½]
The product does not cover outpatient episodes.	[½]
MME can vary between different jurisdictions	[½]
E.g. in the USA it is a comprehensive PMI product type offering reimbursement for the costs of primary, secondary and tertiary care as defined in the policy.	[1]

[Max 9]

(ii)	Policyholder would have a road traffic accident.	[½]
	May require photos of the traffic accident	[½]
	Showing location, damage to vehicle (for proof of accident)	[½]
	Injuries sustained (with requirement that would need to see who is in the photo).	[½]
	Details of other parties also required.	[½]
	The policyholder/or a bystander/or the police or ambulance crew would take photographs	[½]
	And send in a claim to the insurance company.	[½]
	An underwriter would assess the photos and claim information.	[½]

- If necessary send out a template or request further information. [½]
- Request witness statements [½]
- And statements from medics on the scene stating what treatments have been given [½]
- And what treatments may be needed as a follow up e.g. at the Accident and Emergency centre/hospital. [½]
- Determine whether recoveries will be made from other sources e.g. the other party may have caused the accident and have cover which will reimburse your policyholder. [½]
- Make a decision about whether the claim is covered. [½]
- Determine whether recoveries from other parties will be pursued. [½]
- Confirm directly to the policyholder that costs will be met. [½]
- Confirm any limits to the treatment e.g. fixed payments, indemnity [½]
- And any excesses to be met by the policyholder [½]
- And whether cover is emergency outpatient only, inpatient, rehabilitation, physiotherapy etc. [½]
- May require treatments to be carried out by preferred suppliers. [½]
- There may be a list of treatments for which payment is automatically made. [½]
- Fixed payments will be made immediately. [½]
- Policyholder will need to send invoices for indemnity recoveries [½]
- And assist in recoveries from other parties. [½]
- The insurer would need to supply 24-hour coverage for claims processing. [½]

[Max 5]

(iii) Advantages

- Get notified of potential claims immediately. [½]
- Information and witness statements will be better quality as produced while memories are fresh. [½]
- Will get police/ambulance reports. [½]
- Reduces IBNR reserves. [½]
- More certainty over timing of payment amounts. [½]
- May increase sales of PMI. [½]
- May also sell PMI rather than MME. [½]
- Offering something that competitors are not [½]
- And/or otherwise increase competitive position. [½]
- Leading to more business and possible increased profits. [½]
- Insurer will have much of the technology already from operating this scheme with motor claims. [½]
- Scope to settle motor and medical claims at the same time, reduce admin and costs. [½]
- May improve the quality of information available to settle or dispute motor claims. [½]
- Policyholders will receive funds immediately which should lead to increased policyholder satisfaction [½]
- And improved policyholder retention. [½]

Disadvantages

Need to capture further details at the application stage.	[½]
Potential for more IBNER reserves.	[½]
Scope for policyholder to be paid twice – from you and by the at fault party.	[½]
Policyholder may not be in a fit state to take photos or make the claim	[½]
Or may not have camera or policy details etc. with them.	[½]
Police/ambulance may be too busy to assist with claims.	[½]
May make this unpopular/poor brand image.	[½]
More scope to make payments that should not be made	[½]
And increased risk of paying fraudulent claims.	[½]
May be reputational damage if try to recoup money from claims paid in error.	[½]
Need enough suitably authorised underwriters around the clock.	[½]
May require a large increase in admin and other staff.	[½]
Need to have sufficient liquidity to make instant payments.	[½]
As this is a global insurer if this cover is provided in several countries there could be additional problems in getting information required	[½]
For example, translating witness statements	[½]
And dealing with different medical and legal systems.	[½]

[Max 5]

(iv) Advantages

Allows insurer to get experience of the market without all of the commitment and cost	[½]
And can help identify where improvements in the process can be made.	[½]
Helps the insurer collect data to assess if the proposal is a good idea or not.	[½]
Can discontinue easily if it is unpopular.	[½]
Can discontinue easily if there is an increase in accidents, fraud etc.	[½]
Can discontinue easily if the technology is expensive, unreliable.	[½]
Can assess if there are any medical, ethical, legal issues arising.	[½]

Disadvantages

Only applies to PMI/MME resulting from road traffic accidents leading to confusion over which claims can be settled instantly.	[½]
Policyholder dissatisfaction;	[½]
Might build up customer expectations and if then discontinued, this might not be popular	[½]
Or policyholders may not be keen to buy initially if this is seen as temporary.	[½]
Less likely to get money to develop systems properly.	[½]

[Max 2]

- | | | |
|-----|------------------------|-----|
| (v) | Bank account | [½] |
| | Email address | [½] |
| | Mobile contact details | [½] |
| | Security questions | [½] |
| | Next of kin | [½] |

[Max 1]

- | | | |
|------|---|-----|
| (vi) | MME only pays out if a policyholder is admitted to hospital. | [½] |
| | Much easier to determine whether a payment will be made | [½] |
| | And the amount of the payment. | [½] |
| | MME payments are fixed - there is no indemnity element. | [½] |
| | Would reduce the need for invoices or bills to be submitted. | [½] |
| | No need to consider whether other parties will be making payments. | [½] |
| | Would reduce the requirement for IBNER reported. | [½] |
| | MME payments can be paid irrespective of where treatment is provided. | [½] |
| | PMI may require certain hospitals to be used, the feasibility of which would depend on where the accident occurs. | [½] |

However, policyholders may obtain all of the details and then find they are not going to be admitted and hence can’t claim. [½]

Moral hazard as policyholder might exaggerate symptoms in order to be admitted to hospital. [½]

[Max 3]

[Total Max 25]

Part (i) was generally well answered on the PMI product side; however, only the better candidates provided a good list of key product features for Major Medical Expenses products.

Generally, on part (ii) candidates generally did not fully understand the proposition or failed to think deeply enough regarding the practical implications of the proposal to the healthcare products and hence failed to produce enough points to score well.

For part (iii) most candidates provided a good list of advantages and disadvantages. However, only the better candidates scored well on part (iv) which asked for advantages and disadvantages of carrying out the trial. Some candidates discussed the advantages and disadvantages of providing the product rather than the advantages and disadvantages of carrying out the trial.

Part (v) was not well answered. The main items required would be contact details and where to make the payments and how to access personal accounts.

Part (vi) was not well answered. The better candidates mentioned that payment would only be made when the policyholder was admitted to hospital and that the amounts payable would be fixed rather than indemnity payments.

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END OF EXAMINERS' REPORT