



Institute
and Faculty
of Actuaries

EXAMINERS' REPORT

SA1 - Health and Care
Specialist Advanced

April 2023

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.

For some candidates, this may be their first attempt at answering an examination using open books and online. The Examiners expect all candidates to have a good level of knowledge and understanding of the topics and therefore candidates should not be overly dependent on open book materials. In our experience, candidates that spend too long researching answers in their materials will not be successful either because of time management issues or because they do not properly answer the questions.

Many candidates rely on past exam papers and examiner reports. Great caution must be exercised in doing so because each exam question is unique. As with all professional examinations, it is insufficient to repeat points of principle, formula or other text book works. The examinations are designed to test "higher order" thinking including candidates' ability to apply their knowledge to the facts presented in detail, synthesise and analyse their findings, and present conclusions or advice. Successful candidates concentrate on answering the questions asked rather than repeating their knowledge without application.

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.

Sarah Hutchinson
Chair of the Board of Examiners
July 2023

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

The aim of the Health and Care Specialist Applications subject is to instil in the successful candidates the ability to apply knowledge of the health and care environment (in the UK and other jurisdictions) and the principles of actuarial practice to the provision of health and care benefits in complex situations.

Candidates who approach the questions, especially the more substantial elements of each question, in a methodical and detailed manner are 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. Candidates need to apply their knowledge to tailor their answers to the scenario detailed in the question. Those who merely write around the topic of the question or provide a list of factually correct statements but which are not relevant to the scenario described will not score highly. When undertaking past papers for exam preparation, candidates should be providing answers which use the context of the question.

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.

It is often helpful to use subheadings when answering long part questions.

Candidates who give well-reasoned points, not in the marking schedule, are awarded marks for doing so.

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

Overall, this exam was slightly harder than average for recent SA1 exams, and this is reflected in the slightly lower pass mark for this exam sitting.

Well-prepared candidates scored well across most of the paper. Most of the questions required an element of analysis or application of knowledge to a particular situation. For these questions, candidates did not always provide a sufficiently broad range of points to score well. For these questions the better candidates made points that related to the specific scenario set out in the question rather than just generic points, and thus demonstrated that they could apply their knowledge to the situation outlined in the question.

It is encouraging to see many candidates using headings in their answers to the longer part questions and setting out their answers in a methodical manner which helps the candidate maximise their score in the exam, and also aids the examiners in marking scripts.

The comments that follow the questions concentrate on areas where the candidates could have improved their performance.

C. Pass Mark

The Pass Mark for this exam was 58.
63 presented themselves and 24 passed.

Solutions for Subject SA1 - April 2023

Q1

(i)

Many consumers in country A may not be financially sophisticated and therefore may not fully appreciate or understand the benefits of private health and care products and be reluctant to buy it [1/2]

Consumers may not fully understand the limitations of the existing universal health care arrangements in Country A [1/2]

Although limited, the coverage may meet the needs of a large proportion of the population [1/2]

There may be a culture in Country A to rely on the State for healthcare treatment [1/2]

Consumers may lack awareness about the need for private health insurance [1/2]

The H&C companies may not adequately market H&C products so consumers may not adequately understand the benefits [1/2]

Consumers may be concerned about the solvency of private health and care insurance companies in country A [1/2]

The H&C products currently offered may be too costly for many consumers to afford [1/2]

e.g. the population is relatively high risk compared to other countries (e.g. because of poor health or diet or a high prevalence of disease) [1/2]

or there has been high inflation of costs in the country/sector recently [1/2]

(Maximum 1 mark for 2 relevant examples)

H&C products are not seen as good value for money by consumers [1/2]

The H&C products currently offered may not adequately meet the needs of consumers [1/2]

The H&C products on the market may be seen as excessively complex for the target consumer [1/2]

The reputation of the health and care insurance industry in country A may be poor [1/2]

Consumers may feel that health and care insurance companies in country A have not treated consumers fairly in the past [1/2]

Many consumers in Country A may not have access to good quality sales advice. [1/2]

Previous mis-selling could mean that many consumers may not trust insurance salespeople [1/2]

It may be difficult for some citizens to buy the products - for example if health and care insurance is primarily sold online but many citizens in Country A do not have internet access [1/2]

The health and care insurance companies in country A may only target the wealthiest clients as they are the most profitable [1/2]

Or only certain regions so some areas may have low sales (e.g. rural areas) [1/2]

There may only be a small number of insurance companies so there might be insufficient capacity in the market [1/2]

[Marks available 10½, maximum 5]

(ii)

State:

The State could restrict the benefits it offers, means test them or require a contribution towards the cost of treatment [1/2]

Taxation:

The government could offer taxation benefits for individuals on health and care product premiums and benefits	[½]
The government could offer taxation benefits for health and care insurance companies on health and care products	[½]
The government could encourage employers to take out group health and care products	[½]
This could be through offering tax advantages on employer contributions	[½]

Education:

The government could have campaigns to educate consumers on the benefits of health and care insurance	[½]
The government could make sure citizens of country A fully understand the limitations of the existing universal health care system	[½]

Regulation:

The government could ensure there is sufficiently robust regulation to deal with companies that mis-sell to consumers in Country A	[½]
The government could ensure that health and care insurance companies treat customers fairly	[½]
Consumers should be allowed to complain to the regulator or ombudsman if they are not dealt with fairly by health and care insurance companies	[½]
Any regulator or ombudsman should have the power to compel the insurance company to deal fairly with the consumer	[½]
Regulation should be in place to ensure that health and care insurance companies have adequate reserves and capital for the liabilities they have taken on	[½]
Could require companies to provide H&C insurance to their employees	[½]
Government could act as reinsurer for H&C to share the risks in respect of any H&C sold	[½]
Government could introduce a Statement of Best Practice by insurers to increase consumer confidence in the sector	[½]
Could introduce caps or limits on maximum premiums that can be charged for cover	[½]

Competition:

The government could encourage greater competition in the health and care sector	[½]
The government could allow overseas insurance companies to sell in country either directly or via a joint venture	[½]
The government could offer subsidies H&C insurance companies to sell more business in Country A	[½]
Government could launch its own insurance company offering low-cost H&C insurance	[½]

[Marks available 10, maximum 5]

(iii)

Advantages:

Allowing non-domestic insurers into the market could stimulate competition and product innovation in the market	[½]
This could improve consumer choice	[½]
This could reduce the overall cost of health and care insurance	[½]

Non-domestic health and care insurance companies may be able to bring in experience and expertise which will benefit the local domestic health and care insurance companies [1/2]
 This will allow domestic insurance companies to develop their own expertise over time [1/2]
 It will also allow domestic insurers to understand current best practice [1/2]
 In the long-term domestic health and care insurance companies may be able to take over [1/2]
 More new H&C business sold could mean higher tax revenues for the government [1/2]

Disadvantages:

There is a risk that non-domestic health and care insurers could end up dominating the market in country A [1/2]
 This could reduce profits for domestic companies and reduce tax revenues for the state. [1/2]
 This could result in domestic health and care insurers closing to new business as they cannot compete with domestic insurance companies [1/2]
 May not be popular, impacting the government's political popularity [1/2]
 Tax benefits may not materialise depending on where the overseas insurers end up paying tax [1/2]
 There is a risk that the products sold by the joint venture may not be appropriate for the target market in country A: [1/2]
 Products could be too expensive [1/2]
 Products could be too complex [1/2]
 Products could be mis-sold [1/2]

[Marks available 9, maximum 5]

(iv)

Details on Joint Venture Partner:

Due diligence should be carried out on the joint venture partner to understand whether the joint venture partner is a suitable partner for XYZ [1/2]
 Does the joint venture partner have a good reputation? Has it had any mis-selling issues or treating customers fairly issues in the past? [1/2]
 Need to understand what they sell, who they sell to, how much they sell, and how they sell? [1/2]
 How is the domestic insurer perceived in the market? This will impact consumer's perception of the joint venture [1/2]
 What region is the domestic insurer based in? [1/2]
 What is the quality of management of the domestic insurer? Do they sufficiently understand their market? [1/2]
 Are there any regulatory issues with the domestic insurer? [1/2]
 Are the two companies complementary in terms of culture, approach, etc? [1/2]
 Credit rating and financial strength of domestic insurer [1/2]

Understand the market:

XYZ will need to consider the main features of the business written by the domestic insurer in country A [1/2]
 Is this experience relevant and credible for the products that the joint venture will sell? [1/2]

Country A is large and is developing quickly so:	
A developing country may have a higher proportion of younger citizens than a more developed country	[½]
There are likely to be a wide range of different citizen sub-groups with different health and care needs	[½]
There may be significant variation in consumer's income levels and wealth	[½]
The average income may be lower than for a more developed country which means product affordability may be an issue for consumers	[½]
Are these all relevant for the particular region of Country A?	[½]
Consideration will need to be given to the demand for accelerated CI and major medical expenses in the particular region of country A	[½]
Consideration will need to be given to the extent that consumers in the region will be able to afford the proposed products?	[½]
Consideration will need to be given to the financial sophistication of consumers in the region	[½]
Consideration will need to be given to the business mix in terms of age, premium size etc for the region	[½]
Are there any cultural issues or sensitivities that need to be considered?	[½]
Are there any issues with language barriers?	[½]
What is the current economic environment in Country A - is it growing or shrinking?	[½]
How politically stable is Country A (might the government change and remove the joint venture system)?	[½]
How volatile is the exchange rate between country A and the domestic country?	[½]
State benefits:	
The state provides limited healthcare benefits to its citizens. It is very unlikely that these limited benefits would meet the healthcare needs of most citizens	[½]
This means most sub-groups of citizens will want health and care insurance which will meet the cost of medical treatments	[½]
Split of Joint venture:	
How will the profits and losses, ongoing costs etc be split for the joint venture. For example, is everything split 50/50?	[1]
Control:	
Which company has overall control of the arrangement - for example in terms of deciding which products will be sold, how they will be designed?	[½]
How any partnership issues will be resolved	[½]
Pricing / Profit:	
XYZ will ultimately want to make profits on the joint venture	[½]
Consideration will need to be given to the overall volumes, business mix, and product mix to assess whether XYZ will make profits on the joint venture	[½]
XYZ should model the expected future profits on a range of plausible scenarios to assess whether it will meet the desired profitably criteria	[½]
XYZ may need to adjust its corporate profit criteria for the joint venture to be competitive in the market	[½]
XYZ will need to consider the payback period for covering the cost of any	

development costs	[1/2]
If the joint venture only lasts for 10 years will XYZ be able to recoup its development costs?	[1/2]
If the joint venture stops after 10 years on what terms will the domestic insurer buyout XYZ's share of the joint venture?	[1/2]
Products:	
Initially there is no choice on the type of products that the joint venture sells.	[1/2]
Is there a possibility that longer term the joint venture could sell a wider range of possibly more profitable products?	[1/2]
Does XYZ have any experience of selling the products that the joint venture will sell? It probably sells CI business, but does it sell major medical expenses?	[1/2]
Marketability, competition and sales:	
What is the potential overall size of the health and care market in country A and split region?	[1/2]
Are some regions not viable in terms of potential for sales?	[1/2]
Given that domestic insurers in Country A predominantly sell business in the region that they are based, the level of competition will depend on whether there are any other insurers in the region	[1/2]
Need to understand how business is sold in Country A? e.g. is it sold via brokers or some other distribution channel such as online?	[1/2]
Are there any trends in the market that should be considered?	[1/2]
Risks:	
The insurer will need to consider the potential risks in the joint venture	[1/2]
Data:	
Is there sufficient credible data available on the claims experience for health and care insurance business from the domestic insurer?	[1/2]
Is there data available on the specific risks for these products (e.g. CI claim rates, MME benefit levels)	[1/2]
Is there data available on the market as a whole?	[1/2]
Regulatory / Tax:	
Consideration will need to be given to the regulatory and taxation environment in country A	[1/2]
What level of scrutiny will there be on the sales process?	[1/2]
Will this cause significant additional administration cost?	[1/2]
How are insurance companies in country A taxed?	[1/2]
How are policyholders in country A taxed? Is the tax system likely to make the proposed products to be sold more or less attractive to consumers?	[1/2]
How onerous are reserving and capital requirements in country A?	[1/2]
Are there any issues repatriating profits back to the domestic country?	[1/2]
Are there any potential diversification benefits from selling these products in Country A?	[1/2]
Underwriting:	
How will new business be underwritten?	[1/2]
Will the underwriters have sufficient expertise to underwrite the business?	[1/2]

Will Company XYZ need to provide underwriting support? [½]

Reinsurance:

How will new business be reinsured? [½]

What form will reinsurance take? [½]

Given the level of uncertainty over new business will it be possible for the joint venture to reinsure a significant amount of the business written initially? [½]

Perhaps the level of reinsurance could be reduced over time as there is greater credibility of the data on the business written [½]

Expertise:

Will company XYZ need to provide a lot of additional support and expertise to get the joint venture up and running? [½]

XYZ will need to consider in what form any expertise it provides to the joint Venture will be [½]

e.g. will be for admin, underwriting, finance etc [½]

It will also need to consider how this additional expertise will cost, [½]

And how long will it be needed for? [½]

Or will it need to provide expertise for the duration of the joint venture? [½]

Expenses:

XYZ will need to consider the development and ongoing operational cost of any potential deal [½]

Similarly with overheads [½]

How much will costs between W and XYZ be shared? [½]

Other:

Is the expected return sufficient given the level of risk? [½]

Are there other uses for the capital required to set up this arrangement and their expected return? [½]

Are there suitable long-term assets available to support the liabilities? [½]

If the agreement ends after 10 years how will any long-term ACI contracts be managed? [½]

[Marks available 39, maximum 20]

(v)

Overall:

Ideally any payment made should be a fair reflection of the liabilities being transferred from Company XYZ to Company W [½]

It may not be easy to agree what a fair payment is between the two parties [½]

Both sides will want to ensure that neither party gets a windfall from the payment being made [1]

Both sides will need to agree the method of determining the payment and the assumptions used [½]

It may be necessary to bring in external consultants to validate any buyout payment [½]

This is likely to cost money and it will need to be decided how these additional costs should impact the buyout payment [½]

The buyout payment might need to allow for any policyholder actions following the change of arrangement e.g. it may lead to an increase in lapses or non-renewals if customers are not happy. [½]

The proposed approach to determining the payment should not be excessively complex [½]
 The proposed approach should not lead to a payment that is too subjective [½]

Company W:

Company W will want to receive a payment that reflects the liabilities it is taking on [½]
 Company W will want to consider the reserving regime in Country A [½]
 The minimum Company W is likely to want is the best estimate liabilities plus an amount allowing for uncertainty of particular assumptions (e.g. a Risk Margin) [½]
 If statutory reserves are calculated on a prudential basis then ideally company W would like a payment which includes these prudential margins [½]
 Otherwise it will need to find the additional funds necessary to cover these margins [½]
 Company XYZ is unlikely to want to give across these margins, as it will potentially give Company W a windfall [½]
 Consideration will need to be given about any tax that could be due on the payment. [½]
 If tax is to be paid consideration will need to be given to how the cost of any taxation should be split [½]
 It may be appropriate to adjust the buyout payment to reflect costs that Company XYZ should share in [½]
 For example, the joint venture may have an unresolved tax bill or regulatory fine [½]

Company XYZ:

Company XYZ may have invested significant amounts in setting up the joint venture, and in the ongoing running of the joint venture [½]
 Arguably this should be reflected in any payment otherwise it won't get any of this money back [½]
 Company XYZ may feel it has brought much of the expertise to make the joint venture successful [½]
 Arguably it would be appropriate for XYZ to receive some recompense for providing that expertise. Perhaps through a making a lower payment [½]
 Company XYZ has helped to build up the joint venture [½]
 Arguably it should get a share of any goodwill built up in the business. It may not be straightforward to estimate how much this good will is worth [½]
 Company XYZ may feel that Company W is getting a windfall if it gets to keep all the assets of the joint venture insurer that are not set aside to meet its liabilities [½]
 For example, the insurance companies building / computers etc [½]
 To be fair to Company XYZ it may be appropriate to have a payment back to reflect what Company XYZ has put into the joint venture [1]

Practical Considerations:

Can Company XYZ pay Company W the buyout amount on the date required? [½]
 If not Company XYZ may need to pay Company W the buyout payment in instalments [½]
 The payment made may need to be adjusted to reflect any lost interest due to the delay in the buyout payment being made [½]
 There may be issues with how the payment is made. [½]
 For example, is it a transfer of cash or a transfer of assets? [½]

[Mark available 17½, maximum 10]

[Total 45]

Most candidates scored very well on part (i) providing a wide range of possible reasons for the low take-up of private health and care insurance.

Similarly, part (ii) was very well answered with most candidates providing a good range of actions the government could take to increase levels of health and care insurance in the country. Only well prepared candidates mentioned actions to reduce mis-selling. Some candidates suggested relaxing reserving and capital requirements; this would not be an action likely to increase confidence in health and care insurance companies.

Part (iii) was generally well answered. However, only well prepared candidates mentioned this would allow domestic insurers to understand current best practice and develop their own expertise over time.

Part (iv) was generally well answered. There are a wide range of points that could be made, and the better candidates organised their answers under a series of headings such as considering details of company W, understanding the market in country A, regulatory issues, operational issues. They also considered issues raised by the scenario set out in the question such as what would be the implications of country A being a large, rapidly developing country. Few candidates considered the important questions of how would profits and losses, ongoing costs etc be split for the joint venture, which company would have overall charge of the arrangement and how would any partnership issues be resolved.

There was generally little discussion of profitability or reinsurance.

Part (v) was less well answered. The main issue is that both sides would want to ensure that neither party gets a windfall from the payment being made and both sides would need to agree the method of determining the payment and the assumptions used. This then gives rise to a further range of issues to be considered.

Another point not always discussed was whether company XYZ could afford the payment on the date required and what might happen if that was not the case.

Some candidates provided long embedded value or modelling analyses. These scored relatively few marks as the question asked for consideration to be made in determining the buyout payment rather than how the amount might be calculated.

Some candidates incorrectly thought that the buyout payment would be made from company W to company XYZ rather than the other way round.

Q2

(i)	
Return of premium on remaining in force:	
At certain intervals, a return of premium amount is provided if the policyholder remains in force	[1/2]
E.g. every 10 years a sum is returned to the policyholder while the policy remains in force on a permanent policy to age 100	[1/2]
Return of premium on surrender or lapse:	
If a policyholder decides to surrender the policy a return of premium amount will be calculated and refunded	[1/2]
This may only be allowed after an initial period where adequate premiums have been paid to cover expenses etc.	[1/2]
Return of premiums on end of term, or expiry by age, or retirement:	
At the end of term, a return of premium amount is provided to the policyholder.	[1/2]
E.g. at 10, 15, 20 years	[1/2]
At the end of contract at the maximum age of cover, a return of premium amount is provided to the policy holder	[1/2]
E.g. at age 65 or 100 years old	[1/2]
Return of premium on conversion:	
When a policyholder converts the policy, a return of premium amount is returned to the policy holder	[1/2]
E.g. converting from a child's to an adult CI policy	[1/2]
Or converting from a temporary (10-year term) to a permanent (to maximum covered age e.g. 100) CI policy	[1/2]
Return of premium on death:	
When a policyholder dies, outside of death covered within the policy, a return of premium amount is returned to the policyholder's estate or nominated beneficiaries	[1/2]
E.g. accidental death such as car accident	[1/2]
Return of premium on claim declined:	
Provides the policyholder with the option of return of premium to lapse the policy if a claim is declined	[1/2]
E.g. Heart attack does not meet contract terms (not severe enough), but funds can be returned to assist policy holder to meet some needs / improve consumer satisfaction	[1/2]
Return of premium on death or claim within waiting period, survival or moratorium period:	
Provides a policyholder with a return of premium amount if an event occurs within a period in which cover is not valid for payment	[1/2]
E.g. policyholder has cancer within the 90-day moratorium period after sale	[1/2]
Or the policyholder dies within 30 days of heart attack	[1/2]
Return of premium upon partial claim (or early tier claim):	
When a policyholder is paid a partial claim, there can be a return of premium amount as if the sum insured is equal to the partial claim amount. The policy then terminates	[1/2]
E.g. a superficial melanoma claim is covered at 10% of the sum insured. The policyholder can access premium amounts (less the cover the partial claim value	

sum insured) to access additional care (skip waiting lists) [½]

Return of premium on policyholder being diagnosed with a critical illness:
When a policyholder is paid a full claim, there could be a return of premium potentially where the claim amount is disputed between the two parties. The policy then terminates [½]

E.g. a full claim for stroke is submitted but the insurer does not think the evidence is sufficient. There may be an agreed amount paid and the difference in the premiums (between the sum insured and the claim amount paid) returned [½]
(Maximum 1 mark for each option)

[Marks available 11, maximum 4]

(ii)

The actuaries forming the methodology will need to consider the following factors:

General:

Any regulations which would affect which ROP might be offered and the amounts or terms should be complied with to avoid fines or regulator action [½]

Any professional guidance issued on the topic should be complied with to meet actuarial standards [½]

Any disclosure requirements on the insurer to present certain information to potential customers should be complied with to meet regulatory standards [½]

There is a need to consider a fair balance in terms between those with ROP and those without i.e. the terms cannot be too generous to ensure customers are treated fairly [½]

Competitiveness and Sales:

Will want to price and calculate RoP such that it is attractive in the market to generate adequate sales [½]

The more generous the terms the more sales overall or the more sales with RoP. [½]

Will want to ensure in line with industry practice and also consider competitors' terms to ensure not out of line; may attract too much business or reduce sales [½]

Illustrative terms should be considered as it might influence the customer's decision to take the policy the insurer may want to show attractive terms [½]

If multiple ROP options can be included, they will not all be called so is there an improvement in terms across all if multiple are chosen [½]

Pricing of the option:

The price of the option should reflect the risk posed beyond the SACI contract [½]

Will need to balance fair terms between the unused risk premium returned to the policyholder and profitability to the shareholder i.e. the terms cannot be too generous [½]

The level of return that can be earned on the pre-funded money before the event occurs [½]

Factors affecting probability and timing of event:

If the probability of calling the ROP option is minimal, terms may be beneficial e.g. probability of death under age 45 [½]

The probability of calling an ROP option based on economic scenarios e.g. more likely to call option if economic downturn which may be at a time least affordable to insurer [½]

The timing of calling an ROP option may be linked to the term of the policy and

be related to lapse experience for the insurer	[1/2]
For example, sum insured may be reduced to prevent a lapse and a partial ROP payment made on the sum insured balance	[1/2]
Policyholder behavior or experience:	
The price of the option may vary by the type of event because the choice of the option may signal a difference in policyholder behaviour	[1/2]
Alternatively, terms may be set to encourage different policyholder behaviour	[1/2]
E.g. on surrender within 5 years only 25% of the amount is payable, increasing over the term for later lapses to encourage retention of business	[1/2]
Alternatively, the price of the option may vary by the type of event due to different expected experience	[1/2]
Previous experience data should be considered to see if any difference in experience if credible	[1/2]
Should consider if access to the data/insight is available via the insurer, reinsurer, industry	[1/2]
RoP on surrender or lapse may be selected by those are signaling that they are 'healthier' i.e. they expect not to claim before lapse	[1/2]
The pricing of surrender or lapse option should be balanced with it encouraging anti-selective lapse behaviour	[1/2]
Return of premium on death is unlikely to lead to anti-selective behaviour so could provide good terms in amount calculation	[1/2]
RoP on death may be selected by those who are seeking a means of acquiring funds at the time of death for funeral planning without having to own a funeral policy or death benefit	[1/2]
This pricing and terms for this may be strategically generous to appear attractive to distributors when seeking to meet customers morbidity and mortality needs when life cover is not sold separately	[1/2]
Likely low cost because the risk of death at main protection ages is low. However, this would increase with age. Therefore, may consider altering terms by age.	[1/2]
RoP at the end of term may be selected by those using the feature as a quasi-savings vehicle or to delay tax payment if premiums are tax deductible	[1/2]
This would likely be a more expensive option as in effect it could be seen as 'free' insurance	[1/2]
RoP on conversion may be selected by those who may use the feature as quasi-savings vehicle or to avoid inheritance tax e.g. grandparents paying for child policies where the ROP fund is then payable to the child	[1/2]
The pricing and terms for this may be strategically generous to attract high-net worth business with expected light morbidity, more likely to cross sell to, etc.	[1/2]
RoP on claim declined may be selected by those seeking to avoid disappointment if they fail to meet the specific contract terms, while also having some cash returned to help with the level of condition they are experiencing	[1/2]
An insurer with a poorer claims payout rate or customer experience record may consider offering this to continue to attract business	[1/2]
RoP on claim in survival, waiting period, or moratorium may be selected by those seeking to avoid disappointment if they fail to meet the specific contract terms, while also having some cash returned to help with the level of condition they are experiencing	[1/2]
This is a short period and so those who feel it is likely to occur may be signaling selective behaviour	[1/2]

RoP on partial claim may be selected by those seeking to avoid disappointment if they fail to meet the specific contract terms, while also having some cash returned to help with the level of condition they are experiencing [1/2]
 This is likely a cheaper option as the exposure ends after claim [1/2]
 An insurer may want to consider these option terms generously to attract distributors to sell their business by reducing the chance of dissatisfied customers [1/2]

Amount of RoP offered:

Will premiums be returned in full or in part? [1/2]
 If 100% of the cash value of the premiums paid is returned and there is a cooling off period, expenses will need to be considered [1/2]
 It is important that initial set up expenses are recouped so as not to make a loss. [1/2]
 The usual way of doing this is to set initial charges by dividing the total expenses Of the new business operations, including dealing with policy cancellations, by the number of policies that go into force i.e. are not cancelled [1/2]
 If paid in part might only return the additional premium charged to cover the feature [1/2]
 Or return the base premium less charges incurred by the insurer to ensure the insurer does not make a loss in the event the policyholder takes up the return of premium option [1/2]

Charges could include elements to cover:

Admin charges to calculate the return of premium amount and to process the payment [1/2]
 Operational charges may be included based on expected costs to recoup expenses e.g. Reinsurance costs, fixed expenses, underwriting costs, sales process charges, taxes, profit margin charges, cost of capital (*1/2 mark for 4 relevant examples*) [1/2]
 e.g. Insurance premium tax may be non-refundable/any corporation tax paid on present value of policy may affect profitability [1/2]
 Commission charge if within a certain duration with no clawback clause applicable [1/2]
 Commission charges may be excluded if there is a commission return window from the distributor [1/2]
 Experience charges may be included based on actual experience to date to ensure fairness between policyholders if premiums are reviewable and ensure profitability. [1/2]
 e.g. Morbidity, Incidence rates over the whole book, Incidence rates for the premium group (e.g. Female, Smoker), Mortality during survival period and outside of claim, Lapse rates, Expenses, Expense inflation, Investment performance (*1/2 mark for 4 relevant examples*) [1/2]

[Marks available 26½, maximum 7]

(iii)

Customer need:

ROP may meet a clients' need e.g. death ROP could fund funeral expenses [1/2]
 ROP may meet clients' needs as can be sold partly as an investment product [1/2]
 May not be able to better meet customers' needs with fewer premiums spent on covering other risks with insurance like Income Protection [1/2]
 Customer may not be able to better meet current needs such as rent, travel (if funds used on ROP) [1/2]
 Increased complexity increases the risk that client will not understand the product [1/2]

Customer affordability:

The product premiums might be put down as a business expense which may reduce the tax bill so a higher premium not an issue	[½]
May delay tax payment, if premiums are tax-deductible, with ROP returned later	[½]
Policyholders can avoid tax payment if insurance benefits are non-taxable	[½]
Would suit high net-worth individuals, so would make clients happy / attract more clients	[½]
Reduces affordability of the insurance cover as higher premiums for same sum insured	[½]

For the IFA:

Commission will be higher if based on premium charged	[½]
Takes the emphasis off having to sell the product as this can be positioned as 'free' insurance	[½]
Reduces the risk of consumer dissatisfaction in event of no claim or claim refusal making policies more saleable	[½]
Would help retain business if other distributors are also offering this i.e. remain competitive	[½]
Especially for high-net-worth clients who can afford the options	[½]
Reduce affordability of premiums which may lead to fewer policies sold and/or lower sums insured	[½]
Commission will be lower if based on sum insured or number of policies insured	[½]
May trigger regulator action on distributor	[½]
Could lead to bad public relations for distributor if policyholders are not satisfied with level of cover at time of claim	[½]
May sell fewer policies overall (especially to less wealthy clients - reducing potential business market)	[½]
Higher risk of mis-selling as ROP options increases the complexity of product	[½]
May attract poor reputation if the practice is criticised by the regulator	[½]
Policies loaded with ROP may be less affordable, leave policyholder underinsured which may lead to lapse. IFA may have commission claw back terms	[½]

[Marks available 11½, maximum 4]

(iv)

Client A: High net worth 45-year-old doctor with his own medical practice with no dependents:

(maximum 2 marks from the examples below)

The adult policy would be the most appropriate as there are no dependents so not paying for cover not needed	[½]
The policy would be useful for business purposes	[½]
For example, can use the money to pay for a locum to keep practice open	[½]
Can pay for treatment if there is no State healthcare which may allow them to return to work sooner	[½]
Can cover the loss in income during the close of business	[½]
Can put premiums down as business expense and reduce tax bill	[½]
A 20-year term or to expiry at age 65 would cover the doctor to retirement age of 65	[½]
Alternatively, if early retirement was sought a shorter term of 10 or 15 years might be chosen	[½]

Client B: A single parent on low income, with above average savings, who has 2

children aged 18 and 25 in further education:

(maximum 2 marks from the examples below)

The children are beyond age for underwriting for child policies, so adult policies only	[1/2]
The parent could get an adult policy	[1/2]
The children could get adult policies, however as they are in further education, they may not be able to afford premiums if not working	[1/2]
However, as they are young the premiums could be relatively cheap	[1/2]
Single parent may not be able to afford to pay those additional premiums on low income	[1/2]
However, as the parent has savings, perhaps lower sum insured could be selected to allow for all premiums to be affordable	[1/2]
Would choose personal policies in each case (non-business policy)	[1/2]

Client C: A wealthy adult who already owns an adult individual CI policy. She has four grandchildren under 5 years old and is currently looking at inheritance planning:

(maximum 2 marks from the examples below)

The client already has a policy so is unlikely to need extra cover	[1/2]
But may want to extend cover to age 100 if their policy is for a shorter duration	[1/2]
Could purchase 4 child policies to expiry age 18 or 25	[1/2]
These will help reduce the assets of the grandparent to help with inheritance planning	[1/2]
And provide cover for the children	[1/2]
Alternatively, could get a family policy, however the level of premiums per child will be less - so not as good for inheritance planning	[1/2]

[Marks available 10½, maximum 6]

[Total 6]

(v)

Client A:

(Maximum 1 mark from the examples below)

Could allow deferral or avoidance of tax payments	[1/2]
May add more features to make premiums more expensive to increase the premiums to defer or avoid tax payment	[1/2]
There is likely to be no affordability issue so would be able to have sufficient sum insured for needs and afford the ROP features	[1/2]

[Marks available 1½, maximum 1]

Client B:

(Maximum 1 mark from the examples below)

If affordability is an issue, then less likely for ROP options to be selected	[1/2]
Some options may be low cost and provide coverage if other insurance is not affordable	[1/2]
e.g. a return of premiums on death could be added as this would be less expensive	
And provide funds to help meet funeral costs	[1/2]

[Marks available 1½, maximum 1]

Client C:

(Maximum 2 marks from the examples below)

Being wealthy the individual could select multiple ROP options within their

affordability	[½]
A main goal is to transfer wealth, so the more ROP options the better	[½]
Provided the ROP would go to the children as the beneficiary	[½]
Some options would ensure the highest value is provided at a time when cash is beneficial for the children e.g. return of premiums at expiry age would provide cash at the start of university or on taking a gap year	[½]
Some options would ensure cash is provided and look after future insurance provision for policyholder	[½]
e.g. return of premiums on conversion - each child could 'cash in' the premium, and also allow them to continue cover without further underwriting	[½]
As the policy does not allow partial claims, the ROP option is a way to ensure a pay out if the policy never reaches the claims stage.	[½]
e.g. sickness but not at sufficient level for full claim then ROP option may provide funds to cover treatment or loss of parent income while caring for child	[½]
	[Marks available 4 maximum 2]
	[Total 3]

(vi)	
IFA's may sell other insurer's SACI products	[½]
Especially for high-net-worth individuals where the premium would be higher	[½]
Any policies sold would likely be low sum insured values	[½]
The insurer would pay much less commission on those	[½]
The sales of the insurer would drop i.e. loss of new business	[½]
Overhead expenses would be split over fewer policies	[½]
This would have implications on profitability	[½]
More policies may be sold at lower sum insured but this may not be sufficient to cover loss in profitability	[½]
There may be additional one-off expenses involved in the change e.g. change in marketing materials further reducing profitability	[½]
A drop in profits could mean that free capital is reduced	[½]
A higher proportion of total capital would be used for solvency	[½]
This may mean dividends are not payable	[½]
Shareholders may not be happy with this	[½]
If the adoption is voluntary, other insurers may not follow suit, meaning the above consequences could be longer term	[½]
The rating agency may take a different view on the rating of the insurer	[½]
Affecting the company's ability to raise capital	[½]
Distributors may be annoyed and stop selling the insurer's other products	[½]
Increase risk of consumer complaints of mis-selling if consumers are made aware of the regulators concerns about ROP	[½]
Praise from policyholders for making their product more affordable in the future.	
There may be positive media attention for insurer	[½]
Increase risk of lapse and entry if a policyholder can lapse their existing policy with ROP and re-enter on lower a premium level without ROP	[½]
	[Marks available 10, maximum 6]

(vii)	
Advantages:	
Will retain high-net-worth business	[½]
Which may be covering higher proportion of expenses	[½]

A phased adoption would allow the company to monitor and assess the impact	[½]
Increased retention - especially at lower sum insureds where the profit margin is lower so reducing expenses is important	[½]
Lower commission expense at lower sum insureds where profit margin is lower.	[½]
Lower admin expenses as fewer return of premiums to calculate	[½]
The industry statistics may not represent the insurers book - favorably so, such that a minor proportion of their sales are affected	[½]
Disadvantages:	
There may be a loss of sales to competitors	[½]
There may be TCF considerations where options not available to new business.	[½]
The industry statistics may not represent the insurers book - unfavorably so, such that a major proportion of their sales are affected	[½]
There will be additional costs of changing the approach for each phase of the introduction e.g. changing the sum assured for which the ROP is available in product literature	[½]
There may be confusion amongst policyholders and financial advisers leading to complaints that the ROP option is not available if the sum assured chosen is too small	[½]

[Marks available 6, maximum 3]

[Total 33]

Part (i) was surprisingly generally not well answered, given the wide range of pre-specified events that a return of premium (ROP) option could be based on.

Part (ii) was better answered. There are a wide range of factors that would be considered for calculating the specified ROP amounts offered and in pricing the options. Well prepared candidates considered items such as factors affecting the probability and timing of events leading to a return of premiums being made, policyholder's behaviour and the amount of ROP on offer. Some candidates concentrated too heavily on modelling issues (for example stochastic versus deterministic).

Candidates often discussed factors such as competitiveness, selection, the need to recoup expenses and treating customers fairly. However, few candidates mentioned that there may be regulations or professional standards which could affect which ROP might be offered and the amounts or terms that would need to be complied with to avoid fines or regulator action.

Part (iii) was reasonably answered with candidates generally considering the customers of mis-selling or reputational issues due to the potential complexity of the products. However, only well prepared candidates discussed potential issues arising from policies including ROPs having higher premiums than those not offering ROPs.

Parts (iv) and (v) were similarly reasonably answered. The better candidates considered the circumstances of each client. For instance, for client A the adult policy would be useful for business purpose and might allow for reduction or deferral of tax, client B had a low income and hence affordability would be a factor, client C already had a CI policy and the main purpose here was inheritance planning so client C would wish to transfer assets to her grandchildren.

Part (vi) was reasonably answered with candidates providing a reasonable range of different points. Only well prepared candidates considered whether there may be positive consequences for the insurer.

Part (vii) was not well answered. For example, few candidates discussed issues that might arise if industry statistics were not representative of the insurer's business or that whilst a phased approach would allow the insurer to monitor and assess the impact but changing the approach for each phase would incur additional costs.

Q3

(i)

(a)

Healthcare providers:

The financial impact on the healthcare provider will depend on the size of the subsidy [1/2]

If the subsidy is insufficient to cover the additional costs of treating the individuals receive then healthcare providers could end up losing money under the subsidy scheme [1/2]

There may be uncertainty around the level of the subsidy the individual is entitled to until it is received, causing uncertainty for the healthcare provider [1/2]

Larger market may be able to access healthcare [1/2]

Which could lead to more business and increased profits for the healthcare provider [1/2]

The healthcare needs of the market may change if a different segment now utilises services [1/2]

This may have implications for:

Capacity planning [1/2]

Profitability [1/2]

Future facility locations [1/2]

Healthcare providers will now need to engage with government for payment in addition to insurers [1/2]

This will increase the administrative complexity for the healthcare provider which may require system development and incur initial expenses [1/2]

There may be onerous requirements to claim the subsidy, for example, proof of income. Hospital admission processes may need to be updated to collect this information [1/2]

Emergency treatment may need alternative processes [1/2]

There could be liquidity issues for the healthcare provider if there is a long delay between treatment being given and receiving the subsidy	[1/2]
Could reduce credit risk for healthcare providers, if there is more certainty of payment for lower income consumers	[1/2]
(b)	
Customers:	
The impact on customers is likely to depend on income level	[1/2]
Higher income customers who do not qualify for the subsidy may be largely unaffected by the change	[1/2]
Customers who will qualify for the subsidy may re-examine their insurance purchase and may look to lapse their insurance policies	[1/2]
Customers may consider the impact on the benefit if they are changing jobs - a salary increase may mean they lose the subsidy and need more insurance	[1/2]
Customers who lapse or do not purchase insurance because they can avail of the subsidy may not qualify for insurance (for example due to health reasons) in future and may find they no longer qualify for the subsidy	[1/2]
Customers may not be aware of or understand this risk	[1/2]
There may be differing views about the fairness of the subsidy from customers. For example, customers who are just above the threshold for receiving the subsidy may not view the subsidy as fair	[1/2]
There may be additional demand for healthcare services which may increase waiting times	[1/2]
This would adversely impact all customers	[1/2]
If the subsidy is insufficient to meet the cost of treatment for a low-income customer, will healthcare providers ask the customer to meet any shortfall?	[1/2]
This may not be affordable for the customer	[1/2]
(c)	
Health and care insurers:	
If the insurer targeted a lower income market segment, this could lead to reduced new business volumes for the insurer	[1/2]
There could be more impact on health cash plan products compared to PMI (as these would typically offer lower levels of cover and be used more by lower income customers)	[1/2]
This could impact overall company profitability	[1/2]
For example, as it would need to spread its overheads over a smaller number of policies	[1/2]
Alternatively, the lower income segment business may not have been very profitable, and the subsidy could allow the insurer to target more profitable business, leading to increased profitability overall	[1/2]
This has implications for business planning	[1/2]
Will the insurer redesign product offerings?	[1/2]
This may present development opportunities	[1/2]
For example, if insurance plans can provide access to immediate treatment and waiting times have increased due to increased demand	[1/2]
Or this could have an impact on the relevance of excesses/coinsurance (if the first part of a claim is already paid by the State) (<i>or other relevant examples</i>)	[1/2]
How will this impact expense allocations?	[1/2]
Will there be selective lapses?	[1/2]

Insurers focused on the high-net-worth segment are likely to be less affected. [½]

(d)

Government:

The subsidy approach is potentially a cost-effective way for the government to increase healthcare coverage for individuals on lower income [½]

The subsidy will potentially be popular with lower income consumers, which could increase the popularity of the government [½]

The government will need to understand the cost implication of the subsidy. [½]

And how the benefit will be funded? [½]

If the benefit will be funded through higher taxes this will not be universally popular [½]

The subsidy mechanism will need to be determined [½]

Care will be needed to ensure the subsidy is not overly generous to healthcare providers or too low either [½]

Will individual or household income level be used? [½]

What level of income will be used to determine the subsidy? [½]

The government will need to determine how to administer the subsidy [½]

Will providers be responsible for income collecting information or will the government determine this upfront, for example, via the revenue authority? [½]

There may be onerous additional costs for administrating the subsidy scheme in practice to ensure that it works well, and there is limited scope for abuse [½]

This will need to be modelled and several scenarios will likely need to be tested. [½]

In addition to the level of the subsidy, the government will need to determine if it will only apply to certain procedures [½]

i.e. will elective procedures be excluded? [½]

This may increase the health of the nation and/or [½]

may be in response to government promises to the population [½]

[Marks available 28½, maximum 16]

(ii)

Inpatient benefits likely to be more expensive than outpatient benefits and the need for funding is arguably greater [1]

Inpatient treatment may reflect more serious health circumstances [½]

And the funding can be directed towards needed treatment [½]

so the government targets the available resources most effectively by only paying for inpatients [½]

Funding all health requirements may require substantial investment [½]

Which may not be popular [½]

Or feasible given fiscal constraints [½]

Reducing the cost to the State could help limit tax rises required to fund the subsidies [½]

It would also restrict the cost of the scheme perhaps allowing sufficient funding available for other government functions (such as education) [½]

There may be greater opportunity for fraud when considering outpatient benefits [½]

Inpatient benefits may allow the government to contract with a limited number of hospital providers [½]

Whereas the administration of supporting multiple levels of healthcare may be burdensome [½]

The government may be able to negotiate standardised fees for set procedures [½]

This could be more difficult as the number of procedures and providers expands [½]

Data relating to inpatient treatments may be available [½]

Whereas data relating to all treatment may be more difficult to obtain [½]

The cost of inpatient provision could therefore be estimated more reliably. [½]

[Marks available 9, maximum 6]

[Total 22]

Part (i) was reasonably answered. Most candidates provided a reasonable number of points in relation to health and care providers. For these, the main issues would be whether the subsidy covered the cost of procedures provided and that the amounts received by the provider may be uncertain. Most candidates mentioned potential implications for manpower and capacity planning, profitability and future facility locations. Also, healthcare providers will now need to engage with government for payment in addition to insurers which would increase the administrative complexity for the healthcare provider. Few candidates mentioned there may be liquidity issues if the subsidies were only received a long time after the services had been provided. Some candidates appeared to confuse healthcare providers with health care insurers.

For customers, only well prepared candidates discussed potential behaviour changes for people who would be eligible for a subsidy or that low income people may be asked to make up any shortfall in the cost of treatment if the subsidy is insufficient.

The impact on insurers would depend partly on their target markets. Those targeting low income customers would likely be more affected as the customers may decide not to renew their insurance. Fewer health cash plans might be sold. The better candidates mentioned insurers might redesign their products.

Candidates generally provided a wide range of issues that the government would need to consider such as the cost of the subsidy, including administrative costs, and how these might be financed, as well as the administrative costs involved. Fewer candidates discussed how the level of income below which subsidies would be available would be determined.

Part (ii) was less well answered with many candidates not providing a wide enough range of points to score well. Whilst most candidates discussed cost containment and that inpatient treatments covered greater needs, relatively fewer provided a wider analysis.

[Paper Total 100]

END OF EXAMINERS' REPORT



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