INSTITUTE AND FACULTY OF ACTUARIES

EXAMINERS' REPORT

April 2016

Subject SA1 – Health and Care Specialist Applications

Introduction

The Examiners' Report is written by the Principal 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.

F Layton
Chair of the Board of Examiners
July 2016

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

1. The aim of the Health and Care Specialist Applications subject is to instil in the successful candidates the ability to apply knowledge of the United Kingdom health and care environment and the principles of actuarial practice to the provision of health and care benefits in the United Kingdom.

2. Candidates who approach the questions, especially the more substantial elements of each question, in a methodical and detailed manner are far more likely to pass the subject. Candidates will gain few marks if they do not address the question asked but merely write around the topic 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.

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

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

1. Overall the paper was a little harder than some recent papers; however, well-prepared candidates scored well across most of the whole paper. As in previous diets, questions that required an element of analysis or application of knowledge were less well answered than those that just involved repeating bookwork. The comments that follow the questions concentrate on areas where candidates could have improved their performance. Candidates approaching the subject for the first time are advised to concentrate their revision in these areas.

C. Comparative Pass Rates for the past 3 years for this diet of examination

Year	*%*
April 2016	44
September 2015	46
April 2015	48
September 2014	42
April 2014	48
September 2013	44

Reasons for any significant change in Pass Rates in current diet to those in the past:

The Pass Rate is in line with the Pass Rates for this exam over the last three years. It should be noted that the number of candidates sitting this exam is low and so a stable pass rate should not be expected.

D. Pass Mark

The Pass Mark for this exam was 57%.

Solutions

Q1 (i)

- An unexpired risk reserve is held where it is felt that the premium basis is inadequate (i.e. where future premiums are felt to be insufficient to cover future claims).

This could have arisen because:

- The premium was calculated using a uniform distribution but the actual risk isn't uniform and there was more risk to cover than allowed for in the remaining premium.
- The company deliberately sold business knowing premiums will not be sufficient to cover claims e.g. to gain market share, or sold as a loss leader.
- Errors were made in the pricing process or there were errors in the data used for pricing.
- Insufficient data was available to set appropriate pricing assumptions.
- There was a recent change in business mix, meaning pricing assumptions were not relevant anymore.
- Errors were made in the experience rating of group schemes.
- There was a sudden worsening of claims experience and it was not possible to increase premiums.
- This could have been due to an increase in frequency and/or in average claims costs.
- The worsening could have been due to changes in the State healthcare provision or changes to the law / breakout of an epidemic
- Unclear or ambiguous policy wording could have led to unexpected poor experience.
- It could be a completely new product for the company, which is therefore holding the additional unexpired risk reserve to reflect its inexperience in the pricing of this product (in case its premium rates prove to have been misjudged).

(ii)

- It may want to grow market share and the only way to achieve this in the current market was by adopting an aggressive pricing strategy.

- It may be a temporary offer with the aim of increasing new business volumes/profit/market share.

- It may want to grow its PMI volumes to be able to get better discounts from healthcare providers (hospital groups).

- Its current premium rates may not be competitive and therefore it needed to reduce rates to remain competitive.

- Profits may have been sacrificed in order to pay higher commission to distributors.

- It may want to improve persistency rates.

- The PMI business cycle might be at the stage where PMI business is not profitable across the whole market. This may have been due to high competition (or new entrants) driving premiums down.

- The company may have worse claims experience, claims cost and/or higher expenses than competitors and can only compete effectively at levels where its PMI is not profitable.

- The company may want to diversify its risks better to improve its overall capital position and capital efficiency.

- The company may be selling PMI at a breakeven price in order to cross-sell its other products at more profitable rates.

- The company may also want to increase the PMI it is selling to its existing customers of other insurance products in order to improve the claim experience for these policyholders on their other products, particularly income protection insurance.

- It may be pricing with high risk margins that it expects will largely be released into profit.

- It may be because the higher volumes that it can sell at this lower price mean that there is a reduced fixed overhead expense burden for other products.

- Overall, the profit obtained across all products may be higher.

(iii) **Advantages / Pros**

- Policyholders may see this as a valuable benefit.
- It should make this product more marketable with the aim to increase new business volumes.
- It could distinguish the product from those sold by competitors or this might already be offered by competitors and has proved to be popular with policyholders.
- It may improve the company's brand/profile.
- Although there is currently no profit loading within this product, increased new business volumes should increase overall profits due to the spreading of fixed expenses over a larger number of policies.
- Existing customers will feel more valued and more likely to remain loyal customers, possibly reducing lapse rates and increasing take-up of PMI from policyholders having another product with the company.
- The annual health check could be used instead of up-front underwriting. This will therefore save on underwriting costs.
- It may encourage lifestyle changes.
- It may change the business mix to healthier people.
- It could increase the potential for early intervention, potentially reducing future PMI claim costs. Early intervention could also help with the claims experience on other products that these policyholders may hold with this insurer.
- Overall the reduction in claim and underwriting costs may be greater than the additional cost associated with offering the free health check so the expected profit per policy could become positive.
- Information gathered though the health checks can help the insurer to understand the overall level of health of the PMI portfolio and can be used to help set future premium rates.
- It may enable better reinsurance rates to be obtained.
- The insurer will be able to negotiate with a healthcare provider (hospital group) a reduced fee for providing this health check, therefore costing the insurer less than the additional benefit the policyholder perceives they are receiving.

Disadvantages / Cons

- The expected benefits (reduction in cost of claims, increased new business volumes, improved retention, etc.) may not materialise.

- The proposal will increase cost significantly as this will be offered to all PMI policyholders and will be done every year.

- If there are no offsetting benefits, this directly reduces per policy profit and would take the policy into loss and shareholders might object.

- However, the additional cost could be managed by offering the health check, say, only every three years or by offering a simpler (cheaper) health check.

- Alternatively, the premium might have to be increased. However, these measures would reduce the marketability.

- As well as the cost to the medical provider, there is the internal cost of administering the arrangements such as finding locations for the tests and the costs of updating admin systems to cope with the new health checks.

- Claim cost may be brought forward (due to being aware of conditions earlier), which may increase overall costs.

- There is a risk that claim cost may increase significantly as the health check may identify potential illnesses or conditions that require further tests.

- There may be an impact on other products, e.g. extra CI claims.

- The health check may also make policyholders aware of less serious issues that they may have, and as a result they may claim for these when they might not otherwise.

- Policyholders may be sceptical of these health checks.

- They may see it as the insurer using it as an opportunity to gain full insight into their medical history and health, or may consider it to be invasive.

- Policyholders may be concerned that the insurer may decline them cover as a result of this "free" benefit.

- There may be reputational risk if the company performing the health checks does not provide a good service.

- There may be a risk of being sued if the tests miss something the policyholder is later diagnosed with.

- Policyholders may not want the hassle of travelling to the nearest location where the health check is offered.

- The company needs to consider what to do if policyholder "fails" the health test, or doesn't take the health check, and whether cover should still be provided.

- The company needs to consider whether front-end underwriting is still required.

- There is also a risk that a policyholder could lapse the policy immediately after they have received the health check although this risk is deemed to be small as the expected benefit to the policyholder is fairly small (as the policyholder will still need to pay premiums).

- This risk could be mitigated by needing at least three or four premiums to be paid before the policyholder qualifies for the free health check (or perhaps only offering this after the policy has been renewed).

- People may purchase the lowest premium policy in order to get a health check if perceived as a valuable benefit. This could be reduced by just offering on comprehensive cover options.

- There may be lapse and re-entry from group policies to individual policies.

- There may be pressure to extend to group schemes, if not already offered.

- There may be issues for the insurer if the proposal generates a much higher volume of new business (or renewals) than expected and the administration cannot cope.

- Capital requirements might increase.

- Reinsurance arrangements may need to be revised, adding to costs.

- The company needs to consider any impact from treating customers fairly.

Part (i) was often poorly answered; many candidates did not appear to know what an unexpired risk reserve is (often confusing it with the unexpired premium reserve). Only the better candidates gave a good range of reasons as to why an unexpired risk reserve might be needed.

Part (ii) was generally well answered with candidates providing a wide range of relevant points. Few candidates discussed the business cycle.

Part (iii) was generally well answered; however, relatively few candidates included a discussion on whether policyholders might be sceptical of the checks or what might happen if the checks show poor results or policyholders refuse take the checks and what cover, if any, would be provided in such cases. Very few candidates considered what the impact might be on group arrangements.

Several candidates stated that selling more policies would increase profits. However, the current product does not generate profits so stating that selling more would increase profits would not gain any credit unless reasons were given as to why this might be (for example, spreading overheads over more policies).

Q2 (i) **General strategy**

- The insurer might be keen to expand its operations overseas.
- It could perceive the UK health insurance market to be stagnant in the short to medium term for example due to lack of clarity or political uncertainty about State provision.
- It might already have overseas branches and this would fit well with other countries in which it currently operates.
- It might have products that should sell well in the country.
- It could provide increased risk diversification with benefits for overall capital requirements.
- It might consider a joint venture to be the least risky approach in which to obtain access to this market and the least expensive.
- In particular, a joint venture allows it to utilise the local knowledge and experience of the domestic bank and will have automatic distribution access/licence.
- Overall, it is expected to generate higher profits for the insurer.
- The insurer may not be permitted to launch an insurance company in this country on its own (or regulation may prevent it).
- It may want to gain experience in tendering for such opportunities.
- It may have a longer term strategy that once sufficient knowledge of the market has been built up the insurer might exit the direct agreement with the bank and sell its products in the country in a different way (e.g. directly to consumers).

Specific country

- The country itself could be attractive, e.g. it could have a fast-growing economy.
- It could provide economic diversification to the UK if this particular emerging market has demonstrated resilience during the recent global economic downturn.
- The population of the emerging market could be large.
- The potential insurance market could be large with strong growth potential.
- There could be capital, regulatory and tax advantages in the local market.
- There may be a currency advantage leading to profits being higher when converted to sterling.
- There may have been some change to this market making it attractive.
- The government may be offering incentives
- If there is not an established insurance market this joint venture may offer an opportunity to be the first entrant, leading to a competitive advantage.
- The country may have similarities to the UK e.g. same language, similar legal system.

Specific distribution channel

- The bancassurance approach could be attractive, e.g. it could be gaining in popularity in the economy.
- It could have very high growth potential.
- The banking sector could be currently under-penetrated, which could present opportunity to increase sales of insurance products.

Specific bank

- This particular bank could be attractive, e.g. it could have a strong capital position.
- The large bank could be a well-known brand in the local market.
- It could have a strong existing customer base representing a significant proportion of the local population.

- It could have a nationwide network with a large number of branches and agencies.

- It may have good relations with providers.

- Cross-selling opportunity may have been enhanced through strong investment in infrastructure and distribution channels.

- The bank could already have a strong track record in selling health and care insurance.

- It may have a large quantity of relevant data that could be used.

- The company may want to block competitors.

(ii) **Economy**

- Size of economy e.g. GDP
- Size of population
- Profile of population by age/sex
- Profile of population by levels of wealth
- Consider past experience of the economy
- Expected future growth of economy/GDP
- Strength of currency
- Macroeconomic structure
- Inflation rates (e.g. wages, medical costs)
- Healthcare benefits provided by the State
- Political stability
- Availability of appropriate backing assets (if have to be held locally)
- Size of banking sector

Market

- Existing health and care insurance penetration in the banking sector
- Competitors in the local market
- Types of existing health and care products in the market
- The extent of existing group insurance arrangements in the market
- Features of health and care products in the market
- Average benefit/claim amounts
- Size of insured population
- Profile of insured population
- Market shares of other health and care insurers
- Typical premium levels (i.e. average premium sizes)
- Competitor premium rates
- Profit margins, if available
- Expense base, if available
- Commission levels
- Mis-selling issues

- Other regulatory/legislative issues
- Capital requirements
- Tax requirements
- Whether there are any other similar joint ventures in the market
- How solid the credit system is
- Quality of the medical network
- Availability of data
- Availability of reinsurance
- Any health issues in the market
- Any endemic diseases in the country
- Cultural/religious issues which might limit the potential size of the market.

Bank

- Reputation and brand name
- Geographical spread of the bank
- Financial strength
- Existing customer base …
- … and planned future growth
- Market share / size relative to its competitors
- Existing distribution channels
- Existing arrangements with local health and care insurance providers
- Existing health and care insurance penetration in its existing customer base
- Quality of management
- Ownership of the bank
- Risk management structure
- Compliance and legislative issues
- The bank's expectations and objectives for the joint venture
- The terms of the proposed deal e.g. possibility of exclusivity
- Other insurers asked to tender, if available

(iii) **Higher commissions**

- For bancassurance, the standard of advice given could be higher, so willing to pay higher commission.
- The bank's advisers could take longer to analyse customers' needs.
- This could be because the continued relationship with the customer (through their banking products) is seen as highly important.
- The market for bancassurance is those with bank accounts or loans, who could therefore be more financially sophisticated than the insurance company direct salesforce target market and hence would need more complex advice.
- The market may generally pay higher commission to bancassurers.
- Advice-based client service would be provided by the bancassurance channel throughout the whole period of the insurance contract.
- This might not be the case for the direct salesforce, where the client service could be provided mainly at the point of sale.

- The commission also has to cover the cost of training provided by the bank to its employees to sell the insurance policies.
- The training to direct salesforce agents is provided by insurance companies and is not included in commission.
- Banks are also engaged in product development, e.g. scope of cover, data on clients, so the commission may have to cover this cost also.
- Banks would provide pre-qualified leads so higher take-up rates and the insurer also receive assistance from the bank, such as a bigger pool of data, so willing to pay higher commission.
- Clawback of commission could be easier to achieve with the bancassurance channel.
- Higher absolute commission levels could simply reflect higher average policy sizes or higher total volumes sold.
- Insurers may have to pay higher commission rates in order to attract banks to be their distributors.

Lower premium rates

- The higher commission contradicts this feature, suggesting that other elements of the pricing basis must offset this (i.e. be more favourable for bancassurance clients).
- The claims ratio (morbidity experience) is generally lower for bank clients as customers more likely to be higher socio-economic status and therefore in better general health.
- There would be less anti-selection, so a lower need to add margins.
- If worse experience is expected for direct channels, there may need to be higher capital as a result, leading to higher premiums.
- Per policy expense loadings could be lower because banks can have access to a very high volume of potential customers so fixed costs are spread over a wider base or more multiple sales.
- Average policy sizes could be higher for bancassurance, hence lower average premium rates due to the spread of fixed costs.
- Early persistency rates (which can result in losses) could be lower for bancassurance if the advice is of greater quality and because the customers may be less likely to become unable to afford the premiums and higher completion rates.
- Competing insurers in the country may be able to cross subsidise between more profitable business sold via their direct sales force and business sold via the banks so the overall profitability of the insurer's health and care business is acceptable.
- The bancassurance market may be very competitive.

(iv)

- As the economy grows, there could be increased financial awareness amongst the insured population which could create a demand for greater transparency, including full disclosure of the commission.
- The digital revolution and development of social media could lead to easier market comparison.

- An expected increase of knowledge of insurance products by the customers will reduce the need for advice.
- Simplification of products could make the sales process more efficient and hence lower sales costs.
- Regulatory reform could put pressure on the level of commission to be charged; for example, regulations relating to treating customers fairly.
- There could be increasing pressure from the media or a watchdog.
- Increased market competition as a result of pressure to reduce premium rates could drive commission down. On the other hand, a less competitive market could make selling easier therefore lower commission rates could be paid.
- Increased availability and choice of distributors could reduce commission rates.
- There could be pressure from shareholders to make more profit.
- The pressure on rates might refer only to initial commission, reflecting a switch to a more level commission structure in order to promote persistency.

Part (i) – Most students scored well in the question with many students providing a good list of reasons in terms of general strategy and related to the specific country. Fewer students provided many reasons related to either using a bancassurance channel or the specific bank.

Part (ii) – Many candidates scored very well on this question, providing a wide range of points.

Part (iii) was not well answered. Whilst most candidates recognised that the bancassurance clients were likely to have better morbidity experience and that fixed costs might be spread over a greater number of policies or higher policy sizes and that higher commission might reflect higher policy sizes or higher volumes sold, only the better students gave other reasons.

Part (iv) was also not well answered. Several students mentioned regulatory reform or increased market competition but very few mentioned any other points.

Q3 (i)

- Balancing the budget – this would reduce the cost of healthcare to the State.
- Charging for a treatment the national healthcare service is able to provide may be a way of raising money to support other higher priority services.
- Treating sports injuries may be costly at present and may be expected to increase in the future.
- Sports people may demand more ongoing care such as physiotherapy
- More people may be playing sports, leading to increasing number of claims.

- There may be greater public awareness of the long-term implications of sporting injuries (e.g. concussion from head traumas). This could lead to increased claims, and earlier claims, than had previously been the case.
- All the above could be leading to increased pressure on Actuaria's health system, including cost.
- Political promises – this may have been an election pledge, for example, to help reduce taxation.
- This may be following the lead of other countries.
- Sports injuries can be seen to be self-inflicted. Government may wish to encourage people to take responsibility for themselves or may wish to use this approach to improve safety standards in sports.
- Taxpayers may not be keen to continue subsidising other peoples' leisure activities particularly if those taking part in sport are generally perceived to be the more affluent.
- There may therefore be strong public support to make these people pay for their own care.
- The government may wish to promote self provision.
- Protecting the nation's health – this may improve productivity of the workforce and increase GDP if it is possible to improve general healthcare provision if no longer "wasting time" on treating sports injuries.
- Subsidising the poor – the money saved may be directed towards the poorer elements of the population, for example, the elderly (who would generally have lower participation in sports).

(ii) **PMI**

- This will completely replace the State provision for any treatment relating to sports injuries, for examples:
    - Hospital/specialist consultant fees
    - Other surgical costs (e.g. anaesthetist) where relevant
    - Accommodation costs
    - Follow up out-patient treatments
    - GP costs
    - Any drugs/painkillers prescribed
    - Provision of a private ambulance service
    - Cost of accident and emergency *(or other sensible examples)*
- It may cover the full cost of medically necessary alternative therapies.
- It could cover recuperative care – nursing and accommodation, home care – and physiotherapy care.
- It may cover optical costs e.g. replacement of glasses damaged in the injury and dental costs e.g. reinsertion of a tooth knocked out in the injury and prosthetic body parts including false teeth.
- Cover will be on an indemnity basis.

Long term care insurance

- There may be very major sport-related injuries (e.g. broken spine) which require long term care.

- It would provide a cash lump sum or annuity to contribute towards the costs of care or could indemnify the cost of care throughout the remainder of life.
- It would provide personal care and nursing care and associated domestic services.
- Care may be provided in own home, day centre or care home as required.
- There may be a market for older retired sportspeople who may be more prone to certain illnesses as a result of their sports.
- This would be an immediate needs annuity.

Critical illness insurance

- This would be a very simplified version paying out if the sports injury resulted in total permanent disability (TPD).
- It is more likely to be sold as an add-on to other products rather than as standalone TPD.
- This would pay a defined lump sum on meeting the TPD definition as a result of a sports injury after which the policyholder survives for the defined survival period.

Income protection insurance

- This would pay a regular income during periods of incapacity due to a sports injury which would cease on recovery or State retirement age.
- The income level is known at the outset.
- The claim definition would likely be occupation based, e.g. “any occupation” definition would be cheapest.
- It may provide additional benefit for a spouse having to cease work and provide care to a severely injured sports person.

General

- Any of the above products could be made available on an individual or a group basis.
- They may be provided as a temporary cover or as an add-on

(iii)

- The insurer would need to define the products which it is offering very carefully.
- The insurer would need to ensure that terms and conditions can be developed which make the policy desirable but also limit the risk to an acceptable level for the insurance company.
- It would need to consider whether it wants to offer all of these different products or perhaps just the PMI.
- It would need to consider whether it would be a group or individual product (or both).

Market / distribution

- The insurer would need to assess the potential size of the target market and whether there would be a demand for enhanced products exceeding what the state would provide in order to assess whether sufficient volumes can be sold to recoup development costs.
- It would need to consider whether competitor companies are launching similar products and consider competitors' pricing of any new products and how the insurer could the insurer differentiate itself in order to attract a high market share.
- The need to undertake a marketing/advertising campaign would be considered.
- The new products may increase brand awareness more generally which could lead to cross-selling of its other products.
- It would need to decide if entry into this market fits with the company's brand/strategy.
- It would need to consider how the product will be distributed and other changes to the sales process e.g. commission/fees.
- The economic situation would be considered; there might be more demand in a strongly growing economy.
- The effects on demand for existing products would also be considered.

Underwriting / claims management

- The key issue is in adequately defining "sport" e.g. whether bungee jumping, potholing, flying or walking would count as "sports" and then defining a sports injury e.g. whether a cyclist is covered when cycling to work rather than racing.
- Another issue is whether this policy is intended to cover professional sports persons whilst taking part in their sport in a professional capacity or taking part in their own or another sport in an amateur capacity e.g. whether an amateur cricketer playing cricket in the park with non-team members/children is covered.
- It would need to consider whether injuries include such things as stress which would be covered under an IP policy.
- Standard underwriting practices may not be suitable for these policies as they only provide cover for sports injuries. The insurer would need to consider what questions to ask on any proposal form in order to identify the particular sporting risks for each policyholder.
- It would need to be considered whether cover for previous injuries can be excluded, whether pre-existing condition exclusions, waiting periods etc. will be allowed, whether exclusions should be made for high risk sports and whether this would make the policy too unattractive or even unsaleable.
- It would need to investigate whether there is potential for the insurer to claim money back from the government if it is demonstrated the policyholder was entitled to free treatment or whether the government can claim for treatment provided if it can demonstrate the injury met its

definition of sports-related even if it does not meet the insurance company's definition.
- There is additional moral hazard e.g. a professional whose career is declining deliberately having an injury. There could be scope for individuals facing redundancy to do likewise.
- There may be particular moral hazard in establishing whether all of an injury actually results from participation in sport e.g. a policyholder may fall down stairs and claim the injury resulted from falling whilst playing a sport in the garden with their children.

Admin

- There will be many different sources of business.
- System changes are likely to be required.
- The insurer would need to consider the availability of sufficient numbers of trained staff to cope with the expected volumes of new business and would need to ensure there are sufficient trained staff to deal with the likely significantly higher claims management burden.

Morbidity/Mortality

- The numbers of claims incepting would need to be estimated.
- The company will have data on its insured population, but most of these sport claims will have been uninsured so not directly relevant so it may need to obtain external data.
- This needs to be adjusted to reflect the likely profile of those seeking insurance.
- Data on the sports injuries would be needed separately, broken down by sport, by type of injury and cost of claim, which is unlikely to be available at that level of detail.
- Trends and seasonality in experience would need to be considered, especially for morbidity.
- The insurer would need to consider whether data is available of numbers participating in various sports.
- The ages of participants by sport or type of injury would need to be considered: likely to be youngish adults.
- The costs of treating the young and old may be significant.
- The potential for anti-selection would be considered.

Claim costs

- For indemnity products, likely claim costs also need to be estimated.
- Clear definitions of what will be covered under each policy will be needed.
- It will need to consider if any limits on total claim cost can be imposed.
- The insurer needs to know the anticipated future levels of charges by the hospitals and if accident and emergency in particular and other treatment will continue to be available from State hospitals or whether insurers will have to find other suppliers.

- There may be opportunities for preferred supplier discounts at hospitals or clinics.
- Medical inflation/advances will need to be allowed for.

Expenses / new business

- The insurer will need to ensure that expense loadings will be sufficient to cover anticipated costs allowing for changes in initial and claim underwriting costs.
- Any specific one-off and additional costs (e.g. product development, changes to the systems, training, underwriting, advertising) will need to be allowed for, as will annual administration costs, regulation costs etc. Legal costs e.g. of disputes with the government over who is liable, also need to be estimated.
- The insurer will need to decide whether to charge a policy fee or fund related annual management charge.
- Assumptions about new business volumes will be needed for spreading fixed costs, as will assumptions about renewal rates.
- The average premium size will need to be estimated, and assumptions made about the mix of lives e.g. by age and sex.

State intervention

- The insurer would need to know whether the government would be offering incentives to individuals and/or subsidies to insurance companies.
- It would also need to know whether the non-insured population will be paid for (at least initially) by the State or whether individuals will be required to self fund if they are not insured.
- Will preferred suppliers will be selected.
- The insurer will need to consider whether there will be age limits to the government exclusion e.g. whether children and the elderly will require insurance cover.
- The insurer will need to be clear about how the government defines sport and sports injury, on what the State will continue to provide (e.g. treatment to stabilise injuries), how the company's product interacts with any remaining State provision and whether the State limit the premiums or require all comers to be covered.
- State hospitals may carry out treatment and issue invoices so pre-authorisation, for emergency treatment in particular, may not be possible.

Profit

- The insurer will need to consider whether there is potential for sufficient profit according to the company's profit criteria / shareholder (if relevant) minimum profit or return on capital requirements.
- It will also need to consider the sensitivity of profit to key risks and variables including claims costs, expenses and new business volumes.

Risks

- The insurer will need to consider its attitude to risk.
- Any short term guarantees given would be relevant.
- The lack of existing experience of a large part of the potential market increases the risk of mis-pricing; therefore increased pricing margins would be needed.
- The key risk is of claims being higher than expected.
- Underwriting restrictions could also increase such risks.
- Being a completely new market, there is a high risk of new business (and renewal) volumes differing materially from that expected and similarly new business mix differing materially from that expected.
- There is a risk that the proposed legislative change is not actually implemented or is reversed after a short period by a new government.
- There is a reputational risk if customers expect all services to be provided in private hospital type accommodation with no queues, and these expectations cannot realistically be met.
- There may be a risk of lapse and re-entry from existing business, e.g. if sports cover is not as comprehensive on the basic products.
- The insurer may try to reduce this by offering to add the new sports cover to the existing policy at a discount but this will increase costs above what was expected when the policy was sold.
- There is a risk of lapses once an individual stops playing sport, so the experience is likely to be worse than for a standard product.
- The insurer would need to ensure existing products retain the same levels of customer service

Reserves / capital requirements

- The insurer will need to investigate the capital required and its cost to the insurer.
- There may be high capital requirements due to uncertainty of this niche market.
- Significant new business levels may lead to unmanageable new business strain.
- The insurer will need to consider whether the company will have sufficient free assets or access to new capital, if necessary, and whether there are alternative better uses of the capital.

Other factors

- The insurer will need to consider whether reinsurance will be available on acceptable terms.
- The insurer will need to consider the views of the shareholders.
- The insurer will need to consider regulatory requirements, e.g. the need to treat customers fairly.
- The products could be added as a rider to other policies.

(iv)

- Most policies will be sold to individual sports participants, possibly as members of an affinity group scheme or subscribers to a sport-related magazine.
- Mass participation events such as marathons may want to provide cover for participants at that event only.
- Professional (or semi-) teams could provide cover for their team members and to the staff (referees, coaches).
- Amateur teams may wish to cover their teams for events or seasons.
- Schools and colleges may purchase cover.
- Sports clubs / gyms could provide the cover as part of the membership fee. Cover may also be purchased for personal trainers / gym instructors.
- Employers might wish to purchase the product to avoid their staff being off work for a long time with injury particularly if their staff are relatively active and sporting, perhaps as part of a flexi scheme.
- Retired sportspeople may be potential purchasers.

(v)

- They could be distributed through **insurance brokers** (financial advisers).
- Individuals may already purchase non-healthcare insurance e.g. household or motor through a broker and so have an existing relationship.
- Clubs and sports centres may also already have a relationship with an insurance broker.
- They could be sold as a package, possibly alongside other necessary insurance e.g. third party liability, employers liability etc.
- Individuals have bank or building society accounts and clubs and sports centres will have relationships with their business/charity bank which may have **tied agents**.
- Therefore could possibly market alongside or as a package with other bank account services.
- The insurance company's **own sales force** may already sell the clubs/individuals other types of non-healthcare insurance.
- The company could undertake **tailored marketing,** for example through the internet or by having advertising/articles on the websites of sports centres/clubs.
- Discounts may be offered.
- Could aim to become the preferred supplier to a particular sport.
- Adverts/articles could be placed in various sports magazines.
- Brand awareness could be raised through small gifts with the magazines or through sponsorship of a team (gives brand presence at sports events).
- The insurer could advertise at sports events or on television during broadcasts of sports events.
- Endorsements/sponsorship by sportspeople.
- Posters and leaflets could be placed at sports centres or in hospitals and GPs surgeries or in physiotherapist surgeries.
- An event/reception could be sponsored or have a sales stand at sports events.

- **Direct marketing** is likely to be effective for individuals provided a tailored list of leads is used e.g. telesales.
- **Worksite marketing**
- Market heavily to existing customers, e.g. as an add-on rider.

Part (i) was generally well answered, with many students covering a wide range of possible reasons.

Part (ii) was generally poorly answered by most students. Whilst many students showed a good understanding of PMI products and the cover that the new versions might provide, few students provided much discussion about LTC, CI and IP products or the cover that might be provided. Several students said that LTC would not be needed, notwithstanding possible demand in relation to care needs arising from severe sport-related injuries (such as a broken spine).

Part (iii) was generally not well answered with many students not providing a wide enough range of points to score well. Many students commented on potential demand and new business volumes, data issues, expenses, profit, capital requirements, availability of reinsurance and risks such as mispricing requiring higher margins and that the proposed legislation may not be implemented or may be reversed after a short period. However, only the better students discussed in any depth factors such as potential issues in covering professional sportspeople, moral hazard, underwriting, claims costs or how the product would interact with state provision,

Part (iv) was generally well answered with students providing a wide list of consumers to whom the products might be marketed.

Part (v) was generally not well answered with many candidates not providing a wide enough range of points to score well. Whilst most students mentioned own sales force and gave a good list of ways in which the product might be directly marketed, only the better candidates discussed other channels such as insurance brokers, tied agents and worksite marketing.

END OF EXAMINERS' REPORT