INSTITUTE AND FACULTY OF ACTUARIES

EXAMINERS' REPORT

April 2018

Subject ST1 – Health and Care
Specialist Technical

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.

Luke Hatter
Chair of the Board of Examiners
July 2018

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

1. The aim of the Health and Care Specialist Technical subject is to instil in successful candidates the ability to apply, in simple situations, the principles of actuarial planning and control needed in health and care matters on sound financial lines.

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

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

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

Well-prepared candidates scored well across most of the paper.

Questions that focussed on knowledge of the Core Reading were well answered by those who had prepared thoroughly. However, the paper included several part questions requiring wider thinking or application of core reading to specific circumstances, such as questions 4 and 6. Students should recognise that these are generally the questions which differentiate those students with a good grasp and understanding of the subject.
It was pleasing to see that many candidates provided their answers under subheadings, making them easier to follow and mark and also showing how they had applied their knowledge to the specific scenario described.

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. Pass Mark

The Pass Mark for this exam was 57.

Solutions

Q1

(i) The insurer's own risk appetite [½]

The insurer's solvency position / solvency ratio [½]

The insurer's profit criteria for this business [½]

Claims volatility underlying the block of critical illness business [½]

Impact on profits/smoothing of profits [½]

The exposure to catastrophe risks [½]

The exposure to concentration of risks [½]

The existence and adequacy of other risk mitigating measures [½]

The quality and volume of data for pricing [½]

Level of assistance required from reinsurer, e.g. data [½]

Or expertise [½]

Or financial (e.g. opportunity for arbitrage) [½]

Reinsurance commission available [½]

Costs of reinsurance in relation to benefits of risk mitigation [½]

Size of portfolio relative to the overall business of the company [½]

The proportion of CI business classed as 'standard' vs 'non-standard' under different retention levels [½]

Any changes in product which could impact the risk for new business [½]

Level of capital efficiency as a result of reinsurance [½]

Whether there are any specific legislation / regulatory guidelines over retention level [½]

The retention level under existing reinsurance arrangements [½]

Whether the new reinsurance arrangement offers guaranteed or reviewable premiums [½]

The retention limits offered by different reinsurers [½]

Probability of reinsurer default [½]

The cost of holding a fluctuation reserve [½]
[Max 4]

(ii) To determine the retention level to adopt, it is necessary first to estimate the statistical distribution of the risk experience costs of the portfolio on various assumed retention levels. [½]

The insurer then needs to judge how low a probability should be aimed at for various degrees of departure from the overall average risk costs. [½]

One approach is to set the retention level at such a level as to keep the probability of insolvency (or ruin probability) below a specified level. [½]

Using a stochastic model for expected claims rates and a model of the business, expected claims can be projected forward together with the value of the company's assets and liabilities. [½]

By using simulation, a retention level can then be determined such that the company stays solvent for 995, say, out of 1,000 runs. [½]

Another possible (deterministic) approach is to consider the total of: [½]

(a) the cost of financing an appropriate risk experience fluctuation reserve, and [½]

(b) the cost of obtaining reinsurance – the reinsurer naturally incorporates an expense and profit loading in its reinsurance terms, and the cedant incurs administrative expenses. [½]

As the retention level increases, (a) will increase and (b) will decrease, and a retention level can be adopted that minimises the total (a) + (b). [½]

To calculate (a), the simulation approach discussed above would probably need to be used to determine the reserve that the company needs to hold. [½]

May set level to enjoy the required level of data support/expertise [½]
[Max 4]

(iii) Proportional reinsurance on a surplus basis [½]

Facultative reinsurance for sub-standard risks [½]

Risk excess of loss reinsurance [½]

Aggregate excess of loss reinsurance / Stop loss reinsurance [½]

Catastrophe excess of loss reinsurance [½]

Financial reinsurance [½]
[Max 2]
[Total 10]

Part (i) was very well answered with candidates providing a good range of considerations.

Part (ii) was reasonably well answered.

Part (iii) was very well answered.

Q2

(i) & (ii)

Underwriting Effort [½]
Claims with policies having more disclosure and underwriting details during the application process are more likely to be accepted (or, alternatively, known interactions with underwriting requirements may mean some claims require further investigation). [½]

Distribution method [½]
Policies sold through trustful advisors are more likely to be accepted. [½]

Number of products / policies held [½]
Policyholders with multiple products, in particular a combination of savings and protection policies are less likely to be fraudulent. [½]

Premium payments history [½]
Claims on policies with a history of missed premiums are more likely to be rejected. [½]

Increase in premium [½]
Claims on policies with a recent increase in premiums are more likely to be rejected. [½]

Term to expiry [½]
Claims made on policies whose expiry date is approaching are less likely to be accepted [½]

Claim Amount [½]
Lower amount claims are more likely to be accepted. [½]

Age of claimant [½]
May go either way, e.g. claims made for a child /person under 18 may be more likely to be accepted. [½]

Other demographic factors (e.g. gender, marital status) [½]
There may be a need for claims from certain groups of people to be investigated further in some cases e.g. because higher potential for selection. [½]

Criminal / Fraud record [½]
Claimants with criminal / fraud records are more likely to make fraudulent claims.[½]

Type of claim [½]
Claims for disability are likely to be reviewed manually. [½]

Letter from hospital / doctor [½]
Claims with valid proof of doctor's letter are likely to be accepted subject to amount claimed. [½]

Hospitals/doctors [½]
Claims arising from certain hospitals/doctors may require further investigation [½]

Medical condition / Illness [½]
Claims with an unknown illness are likely to require a manual review. [½]

Exclusions [½]
Illness not covered in the policy document will be rejected (or claims for some illnesses may need further investigation if they may have been excluded under the policy) [½]

Credit record [½]
Claimants with bad credit records are likely to require more stringent review. [½]

Non-disclosure [½]
Claims relating to policies identified to have non-disclosure issues are likely to be rejected. [½]

Place of residence [½]
Claims from certain areas may have exhibited a higher proportion of fraudulent claims historically [½]

Current country of residence [½]
Claimants who have moved aboard may require more stringent review. [½]

Occupation [½]
E.g. more likely to accept if it can be linked to specific high probability claim causes for occupation [½]

Smoker status [½]
Certain types of claim may be more quickly accepted for smokers (e.g. lung cancer) [½]

Policy properties such as premium frequency/options/deferred period/stand alone or accelerated [½]
Claims under policies with certain features maybe more/less likely to be investigated. [½]

Date of claim versus date of notification [½]
Long delays may need further investigation [½]

Group schemes: voluntary versus compulsory [½]
More likely to investigate if scheme is voluntary [½]

Any previous claims (e.g. tiered benefits) [½]
Existence of previous claims may lead to more investigation required. [½]

[½ mark for each risk factor, ½ mark for each explanation]
[Max 10]
[Total 10]

This question required candidates to think about how data could be used to analyse claims experience and identify risk characteristics for the purposes of improving the claims management process. In general, this question was very well answered with candidates providing a wide range of possible risk factors and how these might affect the likelihood of claim acceptance.

Q3

(i) Budget policies are:

- Cheaper policies [½]
- with restricted cover [½]
- May have no or limited underwriting [½]
- Often targeted at lower socio-economic groups [½]

In the context of PMI, restrictions take the form of:

- Policies with excesses (the insured bears the first tranche, a pre-specified fixed sum, of each claim) [½]
- May have maximum limit per claim [½]
- Policies contingent on public service waiting periods (cover is only provided where the official waiting list is longer than a pre-specified time, often six weeks) [½]
- Policies that provide cover for only one type of treatment [½]
- e.g. just in-patient cover [½]
- The term can also apply to CI policies which only cover a restricted list of diseases[½]
- And to IP policies which pay the benefit for only a limited period [½]

[Max 3]

(ii) It provides peace of mind to customers that they will received treatment within an acceptable timeframe [½]

at an affordable cost [½]

e.g. if there is a long wait for state treatment [½]

And that they will received treatment for things which are not generally available free from the state health system [½]

e.g. dental treatment [½]

Can provide complementary benefits to those provided by the State [½]

It is cheaper than full cover PMI [½]

And generally easier to understand [½]

So it becomes affordable to lower socio economic groups [½]

May meet needs of those who don't want the full range of choice under a comprehensive PMI product [½]

May be attractive to employers/groups who want to provide something but not too financially onerous [½]

and to get really sick employees back to work more quickly but not pay out on a minor condition [½]

[Max 3]

(iii) **Health cash plans**

These are a defined-benefit, defined-premium insurance products. [½]

Premiums are specified in unit payments per week e.g. £2 per week. [½]

A specific unit of premium corresponds to defined amounts of cover. [½]

Schedules of benefits are bought in "units" with equivalent levels of contribution increase. [½]

The policyholder is entitled to a range of specific payouts dependent on certain healthcare related events. [½]

These include dental, optical, physiotherapy, maternity, hospitalisation, recuperation, hearing aids and consultation. [½]

Cover is usually for the policyholder and their family. [½]

This is not an indemnity product, the purpose of the arrangement is cash in hand as opposed to reimbursement. [½]

In addition to the maximum payouts, there are usually policy limits e.g. payout will be no more than say 50% of the medical bill. [½]

There is usually a waiting period (maybe six months) before benefit eligibility [½]

And Pre-existing conditions may be excluded or benefits restricted [½]

The products are typically community-rated [½]

May have maximum age limit [½]

[Max 5]

(iv) **Major medical expenses (UK)**

It provides a lump sum when the policyholder undergoes surgery [½]

The size of the lump sum varies with the class or severity of the procedure [½]

And they are set out in a fixed benefit schedule [½]

It is estimated to be sufficient to cover the in-patient costs with a balance for incidentals and recuperation expenses. [½]

It is not an indemnity product as there is no guarantee that the benefit will cover extreme surgical complications within the class [½]

The product does not cover outpatient episodes [½]

The premium is significantly lower than PMI [½]

Waiting list plans [½]

Provides full PMI cover only if the public health service is not in a position to provide treatment within a specified period (often six weeks). [1]

If the policyholder can find free public healthcare for his or her condition within the specified time period and within a reasonable radius of their residence, the insurance will not reimburse private expenses. [1]

Dental plans [½]

These provide cover for check ups, and non cosmetic dental treatments. [½]

Waiting periods, policy exclusions and policy maximums may apply and potential policyholders are usually screened initially to identify pre-existing conditions or imminent treatment which can then be excluded [1]

Policies are usually stand alone though may be included in some comprehensive PMI policies. [½]

Insurance companies work in partnership with dentists and provide cover on either a capitation basis – where the insurer and dentist agree a sum per annum per mouth insured or [½]

an indemnity basis – where the insurer covers the actual cost of treatment delivered [½]

Optical plans [½]

These provide cover for spectacles, contact lenses, eye-tests and optical treatments[½]

Waiting periods and pre-existing condition exclusions may apply. [½]

Policies may be stand alone but are more often available as part of health cash plans or some PMI policies. [½]

Personal accident [½]

Benefits are usually specified fixed amounts in the event that an insured party suffers an accident resulting in the loss of one or more limbs or other specified injury. [1]

Cover may extent to the policyholder's family as well as the policyholder [½]

Cover is not on an indemnity basis (as it is not possible to quantify the value of the loss of a limb etc.) [½]

High excess plans [½]

These plans have a very high annual excess limit and/or per claim excess limit [½]

[Max 10]
[Total 21]

Part (i) which was based on bookwork, was generally well answered.
Part (ii) was also well answered with many candidates giving a good range of reasons why budget plans might be bought. Few candidates discussed why group policies might be bought.
Part (iii) was less well answered. Few candidates gave a detailed explanation of how health cash plans operate or mentioned the use of waiting periods or exclusions or that they are likely to be community rated.
Part (iv) was reasonably answered with most candidates providing several examples of budget policies. Whilst dental and optical plans were generally well covered, relatively few candidates describing MME plans made the points that the benefits vary by severity of the surgery, are paid on a fixed benefit schedule, are not indemnity products and don't cover put patient episodes.
The question asked for four examples of budget plans; candidates who described more than four plans were given credit for the four plans for which they scored the highest marks.

Q4

(i) Machines to automatically take personal readings that can be done by the person, e.g. [1]

- blood pressure [½]
- height [½]
- weight [½]
- calculate BMI [½]
- cholesterol [½]
- diabetes [½]

(or pulse, temperature, reaction speeds, grip strength, hearing test, eye test, lung capacity) *[Give marks above for up to 6 relevant examples]*

Computer programs which put the readings into a personalised health report [½]

The report would include information about the relevance of the patients personal readings [½]

And provide personalised advice on getting any of the measures into safe limits [½]

e.g. personalised diet plan to lose weight [½]

e.g. a free pass to a local gym [½]

A computer based questionnaire to assess mental health [½]

With a personalised assessment and suggestions to improve mental health [½]

e.g. refer yourself to a doctor or clinic [½]

e.g. for less serious cases join a self help group [½]

Literature to provide information about smoking, drugs and alcohol [½]

A private room to contact advice helplines and/or book appointments for assistance with [½]

For example, stopping smoking, drug abuse, alcohol abuse [½]

May provide guidance on improving general health of individual [½]

e.g. guidance on exercise [½]

Facility to access lists of the medication the patient has been prescribed [½]
With links to literature/site links/phone numbers to provide information about the medication, side effects, managing side effects, alternatives etc. [1]

And order repeat prescription [½]

And speed dial to specialist doctors'/nurses'/hospitals' websites to help assess/prevent/cure conditions [½]

Private area with facilities e.g. sterile bottles, swabs etc. to create samples [½]

A labelling and dispatch area to send off samples for analysis [½]

Access to results of samples with any follow up information e.g. all clear nothing further required or book an appointment [½]

A doctor or nurse to offer walk up advice [½]
[Max 9]

(ii) There is no uniformity to the provision of wellness centres, or to the services available at each of them [½]

An insurer may have more patients who are not able to access one than it assumes in its pricing and reserving models [½]

Similarly an insurers policyholders may choose not to use the centre [½]

The insurer may be able to access the data recorded by the wellness centres to use for pricing and reserving, [1]

Though it is anonymised and can't be used to underwrite potential policyholders [½]

Similarly it won't relate to the insured population [½]

It may be possible for the insurer to use the computers to advertise [½]

Although this may lead to poorer risks applying for cover [½]

Advantages CI

Patients are less likely to have heart attacks and strokes if their health is regularly monitored [1]

Other CI may be reduced or delayed in healthier patients [½]

Advantages PMI

The wellness centres will encourage a healthy lifestyle which should reduce claims, by number and cost [½]

It will encourage patients to use their GP rather than their PMI cover [½]

It may also reduce the amount of patients needing to see a doctor, thus reducing waits for diagnosis and tests [½]

Which will reduce the severity of illness if they are diagnosed and treated more quickly [½]

Complications e.g. after surgery may be less if patients are healthier [½]

Less likely to be side effects from drugs [½]

Disadvantages CI

Earlier diagnosis will lead to earlier claims [½]

There will be more claims as patients will not die before claiming on their policy [½]

Healthy patients are more likely to survive long enough after diagnosis to claim [½]

CI often has options which allow the policyholder to take out additional cover, on standard rates, without undergoing underwriting. [½]

Policyholders who are aware that they have say high blood pressure or stroke indicators are more likely to exercise the option before getting a formal diagnosis [½]

Similarly they are less likely to lapse their policy without checking if they have a potential claim [½]

Disadvantages PMI

PMI provides cover for short term acute medical conditions, in patient tests etc. [½]

Earlier diagnosis is likely to lead to more referrals and claims [½]

And to more costly claims for longer periods [½]

There will be an increase in anti-selection as policyholders take out policies having first confirmed they are in need of tests [½]

Patients are encouraged to undergo alternative therapies, which may be covered by their policy [½]

Patients will be more aware of the (perhaps much more costly) treatment options available [½]

There is a risk that monitoring devices don't identify illnesses accurately [½]

Which could lead to inappropriate claims [½]

Causing customer dissatisfaction if claims are rejected/negative publicity [½]

[Max 10]

[Total 19]

This was a higher skills type question, intended to make students think and apply their knowledge to the particular realistic situation outlined rather than just providing a checklist of general points. Candidates were expected to consider the sources of information and treatment open to patients which their doctor/insurer may not be aware of; and then think about the consequences of this - a potentially new opportunity to select against an insurer at various stages of the product lifecycle, opportunities to make earlier use of preventative treatments, more costly new treatments being covered, etc.

Part (i) was generally reasonably answered. Whilst many candidates gave a list of items that could be measured such as blood pressure, height, weight, fewer candidates discussed now these might be presented to customers or how advice on health matters might be made available or how assessments of mental health might be provided.

Part (ii) was less well answered, with many candidates not providing a wide enough range of points to score highly. Few candidates mentioned points such as whether the centres were widely distributed or not and whether the services provided were similar, or that the numbers attending a centre might be different to those assumed in the pricing and reserving models. Some candidates assumed that personal data could be used for underwriting individuals. However, whilst the data recorded might be accessible to the insurer it would be anonymised and not able to be used for underwriting purposes, and at a global level it wouldn't necessarily relate to the insured population. Some candidates assumed that the insurer owned and ran the wellness centre but this was not the intention of the question. Whilst many candidates made relevant points about earlier claims and more claims arising but also the opportunities to make earlier use of preventative treatments, fewer candidates mentioned that the monitoring devices may not identify illnesses correctly or draw incorrect conclusions leading to inappropriate claims and potential reputational issues.

Q5

(i) IP insurance is insurance that provides the insured with regular, short- or long- term payments during periods of incapacity. [½]

Incapacity can be defined in different ways, [½]

Own occupation definition is likely to be most expensive [½]

Activities of daily living definition is likely to be cheapest [½]

Any occupation and activities of daily work are likely to be in the middle [½]

There may be an expiry age [½]

The higher the age, the higher the premium [½]

There may be guaranteed insurability options [½]

Which will increase the premiums [½]

The benefit payments start after the deferred period – [½]

That is after the incapacity has been present for some predefined time [½]

The longer the deferred period, the cheaper the premium [½]

As there are some illnesses which would not last past the longer deferred period but claims would have been made under shorter deferred periods. [1]

The benefit may also be paid after certain time policy has been in force, called waiting period [½]

The longer the waiting period, the lower the premium is likely to be [½]

As the longer waiting period reduces anti selection [½]

The benefit is usually limited to certain percentage of pre incapacity salary called replacement ratio [½]

The higher the replacement ratio, the more expensive the premium [½]

There is usually some maximum threshold that is allowed, [½]

As the higher the percentage of salary paid, the less likely people may be to return to work [½]

Benefit escalation may be offered [½]

In which case premiums will be higher [½]

Unless they also escalate, when they might not necessarily be higher [½]

There may be linked claims periods [½]

These encourage a return to work [½]

And hence lower premiums [½]

But benefit paid during deferred period [½]

Which increases premiums [½]

So overall impact may be unclear [½]

Some companies pay also proportional benefit, [½]

It may either increase premiums – as the payment will continue when someone is back to work. [½]

However, it can also lower the premium, if someone is back to work earlier and less benefit is being paid [½]

Some companies also offer rehabilitation benefit [½]

It may increase premium – as it is associated with cost [½]

However, rehabilitation may speed up recovery, hence shortening incapacity and hence reducing the total cost [½]

[Max 8]

(ii) There are a number of definitions of occupation available e.g.

Own occupation [½]

Any occupation [½]

Test based definitions such as inability to perform activities of daily living [½]

Or daily work. [½]

[Credit was awarded for any other reasonable examples above, up to a total of 4 examples.]

Standard definition of incapacity, such as "totally unable through sickness or accident to perform your own occupation and not following any other for profit or reward" (although the exact words used will vary). This definition is normally applied

throughout the duration of the contract. [½]

Some companies amend their definition of incapacity after a certain claim period has elapsed (usually two years). [½]

Companies will also generally use different definitions of incapacity when cover is offered to housepersons and where cover is maintained on a restricted basis during a period of unemployment. [½]

Two categories have been identified by reference to the definition of incapacity, as follows: [½]

Category 1: Ability to perform certain activities of daily living (ADLs). [½]

Category 2: Confinement to home or hospital or inability to perform normal household duties. [½]

[Max 3]

(iii) Some occupations are too risky to offer own occupation cover [½]

As the likelihood of work related injuries is too high [½]

For example stunts people *[give point for any suitable example]* [½]

Or any minor injury could affect the ability to perform own occupation [½]

For example surgeon or pianist with any injuries to hands *[give point for any suitable example]*

The own occupation cover for some people may be too expensive, [½]

Hence they would prefer a cheaper option that still provides them with good cover [½]

May not have experience/data to price accurately [½]

Cannot use this definition if offering cover to housepersons or providing some form of cover during periods of unemployment [½]

The company may not be able to obtain reinsurance if they offered own occupation to everyone [½]

There may be reputational issues if the own occupation cover is sold to people who cannot later claim, for example housewives [½]

Or Treating Customers Fairly issues [½]

It may be hard to define and assess what inability to perform own occupation means. [½]

Would need skilled people to assess and manage claims [½]

May be costly to implement [½]

It may not be a market practice to use this definition [½]

The products may not sell [½]

e.g. may not meet customers' needs [½]

[Max 4]

(iv) The benefit will no longer meet customer needs to pay income during incapacity until the end of the term of the policy or recovery [½]

This could result in Treating Customers Fairly issues, [½]

It could cause consumer confusion [½]

And potentially lead to bad publicity [½]

Would need to consider changes to new versus existing business [½]

There may be regulatory constraints that prohibit this [½]

The company may no longer be able to call its cover Income Protection due to standard definition [½]

Would need to consider if maximum claim duration per claim or per illness. [½]

If per claim, policyholders could have multiple claims, each shorter than 2 years [½]

It may be out of line with competitors [½]

And the product may not sell [½]

Due to inferior benefit [½]

Or IFAs will not be able to recommend it as it is not as comprehensive as other products in the market [½]

[Max 3]

(v) The cost of other benefits included in the cover [½]

Expense loadings forming a large part of the cost [½]

The analysis related to long term claims which may be rare, with the vast majority of claims being short term claims [½]

The inception rates will not change hence not much impact on overall cost [½]

There may be co-morbidities between mental health illness and other conditions; [½]

Policyholders currently claiming on mental health illness reasons may have other conditions so that under the new definition they may still ultimately give rise to a long term claim due to the other conditions [½]

[Max 2]

[Total 20]

Part (i) was very well answered with candidates providing a wide range of features and how they would impact premium rates.
Part (ii), which was bookwork, was also well answered.
Part (iii) was less well answered; only the better candidates discussed that premiums may be too high for some occupations, the difficulties of assessing claims under this definition, potential issues with reinsurers and that it may not be the market practice to offer this definition.
Part (iv) was generally well answered.
Part (v) was not well answered. The main considerations here are how many such claims currently last more than two years and, if they do, what proportion of total claims these are. The level of expense loadings in the premium will also be a relevant factor. Very few candidates mentioned that co-morbidities may give rise to claims under other conditions.

Q6

(i) This population subgroup is likely to be in better health compared to others of the same age group or else they would not have emigrated. [½]

However, as they grow older, the typical health issues associated with old age will very likely arise. [½]

Typical major medical conditions for this population would be heart attacks, cancer, strokes and the onset of dementia (e.g. Alzheimer's disease). [½]

May need protection from local diseases against which they have no immunity, e.g. through vaccinations [½]

Given their typical age range, healthcare needs would include the following:

Access to doctors [½]

Hospitals [½]

Treatments/prescriptions [½]

Dentists [½]

Opticians [½]
Long-term care [½]

Particularly as they may have moved away from family members who could have provided informal care [½]

In-home nursing care/nurse visits [½]

Nursing homes [½]

Geriatric facilities and treatments [½]

Adaptive home devices [½]

Information and services provided in first language [½]

May want support to cover the costs of returning to their home country. [½]

Or fund visits from family members [½]
[The above list is no exhaustive, credit was awarded for other relevant examples of health care needs] [Max 6]

(ii)

(a) Expatriates are likely to form a large proportion of the elderly in the country. [½]

Although in good health relative to native retirees, the expatriates would likely require a larger share of health and care resources than the population average, due to being much older than the population average. [½]

There may be an increased demand for health and care costs for the elderly adding costs to the services provided for ex-patriates. [½]

And this may lead to a shortage of medical facilities, medical staff, care homes, care workers etc as A is a small country [½]

It is not clear if they currently pay tax in the expatriate country. If they do then they are contributing to some extent to the funding of health and care services in the country. [½]

If not taxpayers then they are not contributing financially to the health and care provision provided by the State. [½]

Therefore, this cost must be covered by other taxpayers in the country. [½]

Even if they pay tax now, it is less than the tax paid by native retirees over their lifetimes in the country. [½]

On balance, it is likely that the expatriates require more costly health and care resources than the financial contribution they have made to the State through taxation. [½]

There may be changes to the level and mix of provision required from the state system due to the select group of ex-patriates [½]

for example, different rates of heart disease, dementia compared to the local population [½]

[Max 4]

Funding of State health care services

The state health service would be funded by taxation of the whole population of the country. [½]

Therefore other segments of the population will be subsidising the healthcare costs of the expatriate retirees. [½]

Taxation of expatriates by a larger share than the natives. [½]

E.g. through taxation such as a tax on buying property [½]

Or higher marginal rates of income tax on their pensions income [½]

Or reducing tax free personal allowances [½]

[Give credit above for up to 3 examples]

Incentives for expatriates to buy PMI and other health insurance and so remove or reduce the burden on the State. [½]

Incentives to insurance companies to provide suitable products for expatriates [½]

The government could seek transfers of funds from the home countries of the expatriates [½]

State health and care providers could demand direct payment from non-citizens (i.e. expatriates). [½]

Expatriates may be required to pay for part or all of their treatments [½]

Finance may be raised by requiring a lump sum payment from people coming to the country to live when they arrive [½]

[Max 4]
[Max 6]

(iii)

General Features
Premiums could be accepted in either the currency of the expatriate country or the home country. [½]

Policy documents could be written in the first language of the expatriates. [½]
Advice can be provided on dealing with providers, e.g. hospitals, care homes [½]

PMI [½]
This could include home visits by nurses or doctors. [½]

Health and care providers who speak the first language of the expatriates. [½]

Specialist geriatric care [½]

Repatriation to home country in the event of a serious accident or illness [½]

Cover the travel costs of family members to visit to offer support [½]

Could provide vaccinations for local illnesses [½]

Cash benefits for using the home State system [½]

The expatriate retirees may be wealthier on average than the native retirees and so might expect, and be willing to pay for, higher quality services. [½]

E.g. private rooms in hospitals. Therefore, the product should include this. [½]

However, other expatriates may need budget PMI plans due to affordability [½]

PMI cover may be needed for pre-existing conditions, given the age group [½]

CI [½]
The list of critical illnesses could be designed to meet the industry standards for both the expatriate country and the home country. [½]

Provides a lump sum which could be used for various purposes [½]

☐ Repatriation to home country in the event of a serious accident or illness [½]

☐ Cover the travel costs of family members to visit to offer support [½]

The product could offer the lump sum in either the currency of the expatriate country or the home country, possibly at a guaranteed exchange rate. [½]

LTCI [½]

This could be flexible so that personal and nursing care could be provided either in the expatriate country or back in their home country. [½]

Health and Care providers who speak the first language of the expatriates [½]

It could offer access to care providers who specialise in services for expatriates. [½]
E.g. nursing home within the expatriate community. [½]

The expatriate retirees may be wealthier on average than the native retirees and so might expect, and be willing to pay for, higher quality services. [½]

E.g. luxury care homes and nursing homes. [½]

LTCI is likely to be attractive as expatriates are unlikely to have family members for support [½]

May include provision for visits from family members

Could provide other products such as health cash plans [½]
Dental and optical plans [½]
MME [½]
[Credit was awarded for up to three examples of relevant products.]
Some expatriates may need budget plans

Income Protection [½]
There would be no need for this product because the expatriate retirees have a stable and guaranteed income from their home country pensions. [½]

[Max 8]

[Total 20]

Part (i) was generally reasonably answered. The better candidates discussed the likely features of the expatriate retiree group such as their age and likely health and hence their likely health and care needs. This question asked about needs rather than insurance products that might meet those needs. However, the answers of candidates who discussed insurance products here were cross marked with part (iii) and credit given. Few candidates mentioned that this group may need protection from local diseases against which they may have no immunity.

Part (ii) was less well answered. The better candidates discussed the relative size of the group, their likely increased demand for health care

and impact on resources whilst their likely having contributed less than the local population. In terms of funding, most candidates mentioned pay as you go funding or pre funding and the possibility of increasing taxes in some way for this group. The better candidates also discussed other ways of funding such as providing incentives for this group to take out health insurance (or for insurers to provide such cover), seeking transfers from the home countries of the group or requiring people coming to country A to live to pay a lump sum when they arrive.

Part (iii) asked how the features of the various products might be tailored to meet the needs of the expatriate retiree group. Candidates who just gave a list of the standard features of various health insurance products did not score highly.
Most candidates mentioned that repatriation might be provided, or payment of travel costs of family members to country A and that the group were likely to be wealthier, on average, and hence be willing to pay for higher quality services (although few discussed that others may require budget plans) and that income protection products wouldn't be required. The better candidates also mentioned premiums being payable in either the currency of country A or the home country (and similarly for lump sums payable under CI), the need for policy documents to be written in the first language of the expatriates and for treatments and long term care to be available from providers who speak that language.

END OF EXAMINERS' REPORT