# INSTITUTE AND FACULTY OF ACTUARIES

# EXAMINERS' REPORT

September 2013 examinations

## Subject SA1 – Health & 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.

D C Bowie
Chairman of the Board of Examiners

January 2014

**General comments on Subject SA1**

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

**Comments on the September 2013 paper**

Overall the paper was at the more difficult end of the range, although 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 are advised to include these areas in their revision.

**1** (i) The product may appear unprofitable – i.e. the premiums do not cover the outgo with sufficient margin for profit. This may be because morbidity has been higher than expected giving rise to higher claims costs than expected or expenses have been higher than expected.

The product may not be selling in sufficiently large volumes so that it does not make any contribution to fixed costs and overheads. Alternatively, the product may be selling in such large volumes as to cause excessive capital strain or resource strain.

The product may be considered too risky in relation to the company's risk appetite or because of onerous guarantees, for example.

The company might be abandoning the product in order to focus on an alternative, more up-to-date product which is more relevant to the target market or the product may not be a good strategic fit for the company. For example, the company might be moving into microinsurance, or low premium low benefit markets.

There may be distribution issues e.g. distributors may be demanding more commission or may no longer wish to sell the product under new fee structures.

Regulatory or legislative changes may have made the product less attractive to sell than it was previously, for example, equality legislation, tax changes or changes in the capital requirements regime. New rules on underwriting or premium setting may have increased the risks involved in this product, causing it to become a poor fit to the company's risk appetite.

There may have been changes in the underlying demographics or economic status of the population or changes in State benefit provision which have made the product less attractive to purchase.

The market may generally have moved away from this product, causing sales volumes to fall.

The insurer may wish to move away from a product that has had bad publicity in the market (e.g. claim disputes).

Competitors may be selling similar products at a loss to increase volume, leading to this insurer's premiums appearing uncompetitive.

The insurer may no longer be able to obtain reinsurance at a reasonable price.

(ii) *Advantages to the insurer:*

If the product is being sold at a loss, this will stop more loss-making business being put on the books. This will enable the company to use its capital in a more efficient manner e.g. to fund the new business strain on more profitable

lines of business and to focus its attention and expertise in more appropriate directions.

*Disadvantages to the insurer:*

Adverse media reaction may cause negative customer sentiment. If the reaction is severe enough there may be brand damage, possibly leading to lower volumes sold of the company's other products. There may also be an additional administrative burden from dealing with worried existing policyholders.

The book will run off with a consequent reduction in the volume in-force. This will make the statistical analysis of experience less and less viable and administration costs per policy will gradually increase. There will come a point when the administration becomes economically unviable. The insurer would need to consider selling off the residual business at some point.

Customers may be more likely to lapse their products which will reduce the value of the book. Sick customers, or customers in poor health, are unlikely to lapse, so there will be a selective lapsing effect worsening the morbidity experience of the remaining book and therefore reviewable premiums may need to increase, with corresponding implications.

There will be greater volatility of experience on the shrinking run-off portfolio which may lead to needing higher reserves and capital requirements for that business. Capital requirements may also increase due to the reduced level of diversification now that a whole product line is no longer sold.

Claims management may become less robust as the portfolio reduces, increasing the risk of acceptance of claims that might otherwise have been rejected (e.g. due to exclusions).

The ability to maintain sales volumes is a powerful motivator to maintain the claims service standards – after closure to new business, distributors are likely to be cynical as to the future of the in-force book. Hence distributors may rebroke their clients to a competitor product.

There may be reinsurance implications.

There may be tax implication depending on how significant this product range has been within the portfolio of business (e.g. in the UK, switching between XSI and XSE).

The insurer needs to decide whether it will introduce a replacement new product range. If a new product is launched there may be selective lapse and re-entry. If there is no replacement product range, then the insurer will likely need to reduce its staff levels with a potential impact on morale which will incur an extra "one-off" cost through redundancy payments.

*Other impacts on customers:*

Existing customers should find that the policy continues to be serviced and claims met, at least for the medium term (until the volume of in-force policies falls to below a critical level – as noted above); to this extent they should not be adversely affected.
Depending on the cut-off point used, pipeline customers may or may not find that their policy is still taken on the books.

If policies contain contractual rights to options to increase the cover or term, these options must still remain available to them.

The company is large. If the critical illness product is significant in the market, this could cause a market shift – e.g. increasing prices for new products.

The insurer will need to communicate with customers and other stakeholders. Customers may become aware of media activity or otherwise become concerned about the future of their contract; they may not be clear about whether their contract remains in-force.

(iii) The reinsurer may view this positively as it may also be making losses on any unprofitable business written, for example if the business is reinsured on guaranteed premiums or on an original terms basis. However, the terms of the contract may be more advantageous to the reinsurer, for example, it may be receiving generous commission levels and it will suffer from many of the disadvantages that the direct writer will suffer (as per part (ii)) although to a much lesser extent (and excluding brand damage).

If written on a reviewable risk premium basis this could counteract some of the downside risks to the reinsurer.

The reinsurer's reaction will depend on the precise terms of the reinsurance treat. There may be a recapture fee or other penalty payments to be paid to the reinsurer or it may be entitled to a certain volume of ceded business, and with this product discontinued it may be necessary to cede alternative business to the reinsurer which may not be advantageous to the insurer.

Depending on the relationship the reinsurer may be happy to waive the terms of any termination clauses for the sake of future business that it may hope to secure with the insurer.

As the book runs off, there will be smaller and smaller volumes of premiums and claims, until at some point it is possible that the calculation and settlement of the amounts becomes disproportionate to the sums involved.

As the book runs off, the total sum at risk will decline on the book. It is possible that the insurer may wish to terminate the contract early although whether this is possible will depend on the termination clauses in the contract.

The relationship with the reinsurer will need to be maintained because the back book will continue to be reinsured and there may be other product lines reinsured with them.

The reinsurer may not be able to recoup profits to cover financial commission if new business is not sold.

There may be an impact on other product lines if, for example, the technical assistance that was being provided was predicated on a certain volume of coverage across the entire portfolio.

(iv) The company should first investigate the cause of the unprofitability. This will involve comparing actual and expected for most of the experience items.

The company could reprice its CI product range to make it more profitable (e.g. increase premiums for existing reviewable premium business or for new business.

If the critical illness morbidity rates are worse than expected it could consider performing stricter underwriting or make the claims management process more strict.

The company needs to ensure that it is paying out on claims as anticipated in the original pricing or this needs to be amended to reflect any changes in industry guidance, or market practice and it needs to ensure that policy terms and conditions are tightly worded to avoid having to pay out on unintended claims.

The company could change the product design to improve the profitability, e.g. have reviewable rather than guaranteed premiums or it could amend the list of conditions covered or the definition of disability.

If the business mix is not as expected the company might want to look at its customer segmentation to see if it is hitting the target market it expected and look at moving to different target markets or using different distribution channels.

The company could reprice to remove or reduce any cross-subsidies in premium rates, if these are causing an adverse impact due to mix or it could update the new business mix assumptions for a reprice or try to correct the mix by targeted marketing, for example.

If the lapse experience is worse than expected the company could address this using adviser remuneration levers (e.g. clawback) or by adding product features such as NCD or other loyalty bonuses or improving customer service or using financial reinsurance or avoiding poor performing distributors.

If expenses are higher than expected and/or new business volumes lower than expected costs need to be managed more closely and more efficient systems may be needed. Outsourcing of some functions may be appropriate.

The company may need to increase the number of policies sold in order to spread better any fixed costs. To do so, it could add other features to increase the attraction of the product e.g. children's benefit or TPD or tiered benefits or income and lump sum benefits or write both individual and group business.

It could undertake an advertising and marketing campaign to generate more interest.

The company may decide to review the levels of adviser remuneration.

If investment returns (e.g. due to corporate bond defaults) are a contributory factor to the loss (although this should not be a significant contributor). This could be reduced through investing in less risky assets/improved matching e.g. government bonds or highly rated bonds only or through the use of credit spread derivatives.

If the loss is due to the cost of the reinsurance the company could seek a cheaper treaty or a better reinsurance structure or see whether it could afford to self insure.

The company should also look at other product lines to see if the same is happening elsewhere or if this is a problem specific to critical illness cover.

The company should review competitors' products and prices.

The company could sell critical illness cover as a rider on other products/bundling or the company could use badging. The company could continue to sell as a loss leader or cross subsidise from other business provided the overall benefit to the company was expected to be positive.

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

*Part (ii) was generally well answered. Whilst many candidates provided a list of disadvantages to the insurer of stopping selling a particular product line, rather fewer discussed the advantages to the insurer of this course of action.*

*Only the better prepared candidates did well on part (iii). Most candidates mentioned looking at the terms of the reinsurance treaty and discussed the effects on relations with the reinsurer but many of the other points were often missed, such as the fact that depending on the terms of the reinsurance the reinsurer may also be making losses and so might welcome the cessation of the product line. Few candidates discussed the effects of the run-off of the book of business in any detail.*

*Part (iv) was relatively better answered. Candidates who followed a methodical approach of considering the various reasons why the business might be unprofitable and discussed ways to mitigate each of these in turn tended to score well on this part.*

**2** (i) Daily calorie count compared to the normal requirement
Total consumption of salt, fat, protein, sugar etc.
Daily total of fruit and vegetable consumption
Reminder to consume more protein or fruit and vegetables
Warning when recommended limit of salt or fat is close to being reached
Warning when daily or weekly alcohol limits are reached
Advice/encouragement to reduce consumption of unhealthy substances
Suggestions/recipes for healthy alternatives to processed meals
Encouragement to take more exercise
Calculation of Body Mass Index (BMI)
Guidance related to reaching and maintaining a healthy BMI
Positive/encouragement messages
Reminders to go for regular health check-ups
Links to healthy living online articles
Vouchers e.g. gym/health foods
Suggestions for groups to join

(ii) This would allow the insurer to start to build up a data base of statistical information on policyholders and their habits. There is the potential to combine data with other insurers. This would provide better data for statistical analysis of customer profile and business mix and hence provide more accurate data for use in pricing and reserving, leading to lower margins.

It would provide opportunities to offer advice to policyholders which could then improve claim experience. People using the app are likely to be better risks as they are taking more care of their health.

It could allow the insurer to differentiate itself from competitors and may consequently sell more business, therefore making greater profit. The insurer may also get media attention and engagement with a wider market.

It could allow the insurer to charge a more accurate premium to each individual and the insurer could offer discounts to less risky policyholders.

It would provide opportunities to maintain contact with the policyholder and potentially cross sell other products to them. It may also improve persistency rates due to a feeling of loyalty from users.

It could be extended to managing policy changes and/or claims management.

(iii) Whether the data collected is credible and in sufficient volume to be useful. The insurer may have concerns about accurate reporting, particularly if done retrospectively for a few days at a time, which would rely on memory. There may still be a tendency to under report some items. Also, customers may not be comfortable sharing some of this information. The insurer would need to validate the data in some way e.g. check it was entered in real time.

A different policyholder profile from the current one may be attracted.

It will be more difficult to price initially, to the extent that cross-subsidies exist. Discounts will be difficult to determine, at least until more experience is obtained. The insurer would probably need to insist on data being recorded for a minimum number of days and weeks to continue to qualify for any discount.

There will be implementation costs for the insurer plus an increase in administration and monitoring cost to the insurer. The insurer would need specific expertise that may not currently have and staff training. Complex technical issues may also be encountered.

The cost of app or access to internet may be an issue for some policyholder.

Daily recording is likely to be very onerous. There are likely to be lapses in data recording or temporary missing input. Policyholders may stop entering data altogether. Also, it may not be possible to use the app when abroad.

There may be concerns about the security of personal policyholder data. There is a risk of being seen as providing expert medical advice. Hence there is the potential for ethical or reputational risk e.g. if the insurer didn't alert a policyholder to health risks such as very low BMI or excessive alcohol consumption or it may be seen to encourage obsessive self monitoring leading to hypochondria or eating disorders.

The insurer would need to keep up-to-date with the latest recommendations, e.g. in relation to diet. There may be conflicting/changing industry or government advice on recommended levels of food intake / exercise etc.

Customers may find the messages and reminders annoying/patronising.

There may be a selection effect; as more likely to be used by those who are already healthy so those who don't take it up are likely to have worse overall health.

The insurer should check whether competitors are also offering this service.

The app may not catch on so the cost of setting up the service is not recouped.

*Parts (i) and (ii) were well answered, with candidates generally providing a good list of potential messages in part (i) and appreciating the various advantages to the insurer of the online monitoring.*

*In part (iii) most candidates made points about the accuracy of the data, the onerousness of inputting data on a daily basis, the implementation and other associated costs. However, only the better candidates mentioned the potential difficulties on pricing, the possibility of not recouping the setting up costs, the difficulties in keeping up-to-date with the latest health recommendations or the ethical considerations about being seen as providing medical advice.*

**3** (i) (a) **Revenue collection**

This is the process by which the health system receives money from households and organisations or companies, as well as from donors.

Healthcare systems have various ways of collecting revenue, such as general taxation, mandated social health insurance contributions which are usually salary-related and almost never risk-related, voluntary private health insurance contributions which are usually risk-related, and out-of-pocket payments or donations.

Most high income countries rely heavily on either general taxation or mandated social health insurance contributions. In contrast, low income countries depend far more on out-of-pocket financing.

For organisations relying mainly on general taxation, such as ministries of health, collecting is done by the ministry of finance and allocation to the ministry of health occurs through the government budgetary process.

(b) **Pooling**

This is the accumulation and management of revenues to ensure that the risk of having to pay for healthcare is borne by all the members of the pool and not by each contributor individually.

Pooling is traditionally known as the "insurance function" within the healthcare system whether the insurance is explicit (people knowingly subscribe to a scheme) or implicit (as with tax revenues). Its main purpose is to share the financial risk associated with health interventions for which the need is uncertain. When people pay entirely out of pocket, no pooling occurs.

For public health activities and even for aspects of personal healthcare – such as health check-ups – for which there is no uncertainty or the cost is low, funds can go directly from collecting to purchasing. This is an important consideration with regard to the regulation of mandatory pooling schemes, as consumer preferences for insurance packages often focus on interventions of high probability and low cost (relative to the household capacity to pay) although these are best paid for out of current income or through direct public subsidies for the poor.

Pooling reduces uncertainty for both citizens and providers by increasing and stabilising demand and the flow of funds. Pooling can increase the likelihood that patients will be able to afford services and that a higher volume of services will justify new provider investments.

(c) **Purchasing**

This is the process by which pooled funds are paid to providers in order to deliver a specified or unspecified set of health interventions.

Purchasing can be performed passively or actively. Passive purchasing implies following a predetermined budget or simply paying bills when presented. Strategic purchasing involves a continuous search for the best ways to maximise healthcare system performance by deciding which interventions should be purchased, how, and from whom. This means actively choosing interventions in order to achieve the best performance, both for individuals and the population as a whole.

Purchasing uses different instruments for paying providers, including budgeting. Recently, many countries, including Chile, Hungary, New Zealand, and the UK, have tried to introduce an active purchasing role within their public health systems.

(ii) (a) **General taxation, with free healthcare provided by national health services**

*Transparency of cost*

This appears to be the least transparent of the options. It is impossible for taxpayers to make a well-informed judgement about the value for money they are getting, because they have no knowledge of the amount of taxation being allocated to healthcare provision. There is no clear contract setting out the services that taxpayers' payments entitle them to receive. Patients are also not aware of the actual cost of treatment.

*Social fairness*

Taxpayers are unable to judge whether or not they are paying a suitable amount for the poor. Actual fairness in terms of distribution of burden depends on the tax structure but the poor are likely to be subsidised by the more affluent, so fair in that respect. Access to national health services should be available to all, therefore also fair in that respect.

*Consumer empowerment*

Advance payment to the government treasury coupled with inability to influence resource allocation puts consumers in a weak position. There is also apparently a lack of choice of alternative providers. Therefore there are very limited ways to express dissatisfaction.

*Quality of care*

National health services have sole responsibility to provide care which weakens incentives to provide high quality care. Due to political

interference, it may be difficult for providers to act in the best interests of patients by following best practice and there may be less incentive to do so due to lack of competition. However, the national health service will be subject to government control and so best practice could be imposed. The approach may suffer from a need to prioritise if there are funding pressures.

*Conflicts of interest*

The government treasury will have interests of its own which do not necessarily coincide with those of consumers. There may be a conflict between taxation levels and spending. This will depend on the demographic profile and general levels of heath.

*Matching expectations with treatment capacity*

Funding healthcare predominantly from general taxes is unlikely to be an effective way of bringing the expectations of patients into balance with the treatment capacity of the system. This approach may end up with long waiting lists, particularly during economic downturns when general taxation receipts are lowered. The effects may vary around the country.

People's expectations may not be realistic.

(b) **Social health insurance contributions paid by the employer and the employee, with provision through competing insurers**

*Transparency of cost*

If the cost is expressed as a percentage of income, the employees will be aware of the cost of insurance to them individually. If the proportion being paid by the employer is also communicated to the employees, they will also be aware of the overall cost of insurance. However, patients will not be aware of the actual cost of treatment. It may be unclear how any increase in future medical costs will be shared between the employers and employees. Transparency is reduced if employees are required to subsidise those not in employment (see below).

*Social fairness*

Arrangements will have to be made for those who are not in employment including children and the retired. These groups are likely to be relatively less affluent than those in employment or those most in need. Their insurance premiums will need to be paid by the government (this may be achieved by higher contributions from those in employment).

*Consumer empowerment*

Individuals may be able to choose their insurer. Patients may choose healthcare providers which provide them with a range of specialists to choose from. The option to choose insurer and healthcare providers is likely to lead to high consumer/patient satisfaction.

There is a potential loss of empowerment if the employer or Government chooses the providers.

*Quality of care*

The quality of care is likely to be relatively high - competing providers have an incentive to attract the insured. Competition may mean that new medical technologies are more likely to be made available to those who may benefit from them.

*Conflicts of interest*

Employers need to balance the contributions towards health insurance premiums with other employee benefits.

Providers would want to maximise profit margin whilst consumers would want value for money.

*Matching expectations with treatment capacity*

Competition is likely to lead to high supply of services. Waiting lists are likely to be shorter than under the general taxation system in (a). Hospital treatment capacity is also likely to be high as a result of competition.

(c) **Voluntary health insurance, paid by the employer**

*Transparency of cost*

As the employers pay for the employees' health insurance, individuals are unlikely to have the incentive to find out the cost. Employers are bearing the full cost and would aim to minimise the cost of insurance. One approach would be to engage employees actively in the decision making process about their health coverage, and to provide incentives for them to use services wisely, or other benefits may be reduced (e.g. bonuses) or removed in order to balance the overall package – this could give more awareness of the underlying cost.

There could be additional opaque cost arising from any taxes required to fund healthcare for those who are not in employment and/or do not have individual insurance and there is no transparency of cost for those who are not covered by the insurance – as for (a).

There is complete transparency of cost for those not covered, if they are otherwise subsidised: the cost to them is zero

*Social fairness*

This system is inequitable if some employers do not include health insurance as a workplace benefit. A safety net which guarantees access to hospital care regardless of ability to pay will need to be in place. This could be in the form of health centres that provide high quality, cost effective and comprehensive care to the uninsured and medically underserved. These centres could be funded by grants, private insurance payments, patient fees and private donations. There will also be the need for tax-payer supported systems for those not in a scheme paid by an employer, which will include children, the unemployed and the elderly.

*Consumer empowerment*

The choice of whether the insurance is offered appears to lie with the employer. If employers only offer one plan, employees are unable actively to shop around for plans. It is not clear whether employees will face adverse consequences if they do not like the health insurance offered by the employer and opt for buying health insurance on their own outside the workplace.

*Quality of care*

Relatively high standard of care is expected as providers are subject to selection by insurers and the insurers are subject to selection by the employers. If the employees are given the choice of a range of providers, the providers will have more incentive to provide high quality of care.

Competition may mean that new medical technologies are more likely to be made available to those who may benefit from them. However those who do not have insurance may not have the same quality of care. There is less competitive pressure under this option than under option (b).

*Conflicts of interest*

Providers would want to maximise profit margin whilst consumers would want value for money.

Employers would want to minimise the cost of insurance and balance the overall benefits provided to employees and there may be conflicts with employer overall profits.

The government would need to balance the savings in the provision of healthcare and the cost of any tax incentive that it would need to implement to encourage employers to offer private insurance.

*Matching expectations with treatment capacity*

Waiting lists are likely to be shorter than under the general taxation system. Hospital treatment capacity is also likely to be high if employees have a choice of providers.

(d) **Mandatory catastrophe insurance, paid by the individual, which covers all medical expenses above a threshold, plus a tax-protected savings account**

*Transparency of cost*

The insurance premium and amount saved is known to the individual. It is effectively a savings scheme rather than an insurance scheme thus encourages personal responsibility. Consumers have control over their own health care funds (and pay providers just as they do for any other goods or services). They need to make trade-offs between different spending priorities, so are likely to be more price conscious.

There may be hidden costs from higher taxation to subsidise those who cannot afford sufficient savings.

*Social fairness*

The mandatory nature means near universal coverage. However, it is only fair if those who cannot afford to pay still receive care including those for whom the savings account has been exhausted. There is no apparent cross-subsidy from rich to poor (everyone is entirely responsible for their own health care). Hence, the greatest advantage may be to higher tax payers.

*Consumer empowerment*

There is no choice about whether to pay for healthcare but there is likely to be choice regarding where to obtain care and, to some extent, when and how much to spend from the account for less acute conditions.

*Quality of care*

Reasonable quality of care is likely due to universal coverage.

Providers can practise medicine as agents of patients rather than agents of employers or insurance companies. There are likely to be competing providers that will offer better services and drive for efficiency.

The government may provide encouragement to follow best practice.

*Conflicts of interest*

There are fewer conflicts of interest with this system than many of the others. However, there remains a potential conflict from insurance providers wanting to maximise profit, particularly since the insurance is mandatory.

There may be a conflict between an individual's desire to get treatment and their desire to save money.

*Matching expectations with treatment capacity*

Personal responsibility and the incentive to minimise the need to draw down the accounts should help to manage waiting lists. There are likely to be higher expectations as people are directly paying for their treatment

(e) **Voluntary health insurance, paid by individuals, with tax subsidies**

*Transparency of cost*

Consumers are very aware of the cost of insurance and will be able to determine the value of the tax subsidies, netting off against this cost. However, those who choose to remain in the public system are unable to see how much they are paying and there are again potential non-transparent tax implications for those who do purchase insurance, to subsidise those who remain in the public system. The actual cost of treatment is still unclear under this method.

*Social fairness*

The approach could contradict social fairness as those in highly paid jobs are more likely to purchase private insurance if the quality of care in the private sector is better. However there is at least health provision available for everyone.

*Consumer empowerment*

The purchase of insurance being voluntary gives more personal responsibility. Furthermore, privately insured patients have greater choice of hospital provider (public and private) and of doctor. The individual will also likely have a choice of which insurer to use.

*Quality of care*

As private patients are free to choose and change their doctors, those treating the privately insured have a financial incentive to provide high quality care. For example, salaried specialist doctors in public hospitals often have rights to treat some patients in those hospitals as private patients, charging fees and usually contributing some of that fee income to the hospital.

Quality of care may be reduced for those who do not purchase insurance.

*Conflicts of interest*

Providers would aim to maximise profit whilst individuals would aim to minimise cost.

Individuals would need to balance the benefits against the cost of private insurance. They will need to consider the additional cost against the tax incentives and the cost of private insurance against other personal priorities.

The government would need to balance the savings in the provision of healthcare against the cost of tax incentives to encourage individuals to purchase private insurance.

*Matching expectations with treatment capacity*

The private insurance sector appears to meet demand, particularly by enabling the insured to jump waiting lists.

The privately insured are also able to choose when, where and from whom to receive treatment.

Those who have no private insurance are likely to experience longer waiting time; this is less likely to be the case for the privately insured.

More resources may be available for those in the national health service system. However, capacity may be an issue for those not taking out insurance, particularly if resources are diverted to the private sector.

*Part (i) was a bookwork question; whilst part (a) was generally reasonably answered, very few candidates scored well on parts (b) and (c) – this reinforces the need to learn (and understand) the bookwork carefully.*

*Part (ii) was also generally not well answered with candidates tending not to generate a sufficient range of separate points, given the high number of marks available. It was, however, good to see many candidates setting out their answers under the different headings provided in the question.*

*Under transparency of cost few candidates considered factors other than the immediate cost to the individual. There was little comment on the opaqueness of costs under a general taxation system or on the subsidies between different groups of people under some of the options. Also few candidates considered the transparency of the actual cost of treatments. Under option (c) several candidates thought that the cost would be transparent to the employee but this would only be the case where the employer provides information of the costs to the employees and even then the cost for an individual employee is unlikely to be transparent..*

*Under social fairness the better candidates considered the effects of each option on the various groups of people involved such as the unemployed, the retired, children and spouses, as applicable.*

*Few candidates commented on the fact that under option (a) there was little consumer empowerment.*

*Comments on the quality of care were usually restricted to whether there was competition or not and those on conflicts of interest to those facing insurers and providers, with few comments on potential conflicts for employers, employees or the government, where relevant.*

*Similarly the comments made on matching expectations were generally relatively perfunctory.*

*Overall, candidates scored more highly on option (a) followed by (b) and (e). This is probably not surprising as these comprise most of the funding systems currently used in developed countries. Part (c) and particularly part (d) were relatively much less well answered.*

## END OF EXAMINERS' REPORT